STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3
AMENDED REPORT ☐

APPLICATION FOR PERMIT TO DRILL

1. WELL NAME and NUMBER
BONANZA 1023-5L4AS

2. TYPE OF WORK
DRILL NEW WELL ● REENTER P&A WELL ○ DEEPEN WELL ○

3. FIELD OR WILDCAT
NATURAL BUTTES

4. TYPE OF WELL
Gas Well Coalbed Methane Well: NO

5. UNIT or COMMUNITIZATION AGREEMENT NAME

6. NAME OF OPERATOR
KERR-MCGEE OIL & GAS ONSHORE, L.P.

7. OPERATOR PHONE
720 929-6515

8. ADDRESS OF OPERATOR
P.O. Box 173779, Denver, CO, 80217

9. OPERATOR E-MAIL
julie.jacobson@anadarko.com

10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)
UTU33433

11. MINERAL OWNERSHIP
FEDERAL ● INDIAN ○ STATE ○ FEE ○

12. SURFACE OWNERSHIP
FEDERAL ● INDIAN ○ STATE ○ FEE ○

13. NAME OF SURFACE OWNER (if box 12 = 'fee')

14. SURFACE OWNER PHONE (if box 12 = 'fee')

15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')

16. SURFACE OWNER E-MAIL (if box 12 = 'fee')

17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')

18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS
YES ● (Submit Commingling Application) NO ○

19. SLANT
VERTICAL ○ DIRECTIONAL ● HORIZONTAL ○

20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	1951 FSL 1965 FWL	NESW	5	10.0 S	23.0 E	S
Top of Uppermost Producing Zone	1865 FSL 1083 FWL	NWSW	5	10.0 S	23.0 E	S
At Total Depth	1865 FSL 1083 FWL	NWSW	5	10.0 S	23.0 E	S

21. COUNTY
UINTAH

22. DISTANCE TO NEAREST LEASE LINE (Feet)
554

23. NUMBER OF ACRES IN DRILLING UNIT
1923

25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)
988

26. PROPOSED DEPTH
MD: 8639 TVD: 8510

27. ELEVATION - GROUND LEVEL
5327

28. BOND NUMBER
WYB000291

29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE
43-8496

Hole, Casing, and Cement Information

String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
Surf	11	8.625	0 - 2350	28.0	J-55 LT&C	0.2	Type V	180	1.15	15.8
							Class G	270	1.15	15.8
Prod	7.875	4.5	0 - 8639	11.6	I-80 LT&C	12.5	Premium Lite High Strength	280	3.38	11.0
							50/50 Poz	1150	1.31	14.3

ATTACHMENTS

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES

- ☑ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER
- ☑ COMPLETE DRILLING PLAN
- ☐ AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)
- ☐ FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER
- ☑ DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)
- ☑ TOPOGRAPHICAL MAP

NAME Gina Becker | **TITLE** Regulatory Analyst II | **PHONE** 720 929-6086

SIGNATURE | **DATE** 10/17/2011 | **EMAIL** gina.becker@anadarko.com

API NUMBER ASSIGNED
43047520680000

APPROVAL

Permit Manager

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Kerr-McGee Oil & Gas Onshore. L.P.

BONANZA 1023-5L4AS

Surface: 1951 FSL / 1965 FWL NESW
BHL: 1865 FSL / 1083 FWL NWSW

Section 5 T10S R23E

Uintah County, Utah
Mineral Lease: UTU-33433

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. & 2. **Estimated Tops of Important Geologic Markers:**
Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

Formation	Depth	Resource
Uinta	0 - Surface	
Green River	1291	
Birds Nest	1553	Water
Mahogany	1903	Water
Wasatch	4268	Gas
Mesaverde	6361	Gas
MVU2	7339	Gas
MVL1	7871	Gas
TVD	8510	
TD	8639	

3. **Pressure Control Equipment** (Schematic Attached)

Please refer to the attached Drilling Program

4. **Proposed Casing & Cementing Program:**

Please refer to the attached Drilling Program

5. **Drilling Fluids Program:**

Please refer to the attached Drilling Program

6. **Evaluation Program:**

Please refer to the attached Drilling Program

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7. **Abnormal Conditions:**

Maximum anticipated bottom hole pressure calculated at 8510' TVD, approximately equals 5,446 psi (0.64 psi/ft = actual bottomhole gradient)

Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

Maximum anticipated surface pressure equals approximately 3,562 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

Per Onshore Order No. 2 - Max Anticipated Surf. Press.(MASP) = (Pore Pressure at next csg point-
(0.22 psi/ft-partial evac gradient x TVD of next csg point))

8. **Anticipated Starting Dates:**

Drilling is planned to commence immediately upon approval of this application.

9. **Variances:**

Please refer to the attached Drilling Program.
Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- Blowout Prevention Equipment (BOPE) requirements;
- Mud program requirements; and
- Special drilling operation (surface equipment placement) requirements associated with air drilling.

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

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Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12 1/4 inch hole for the first 200 feet, then will drill a 11inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 11 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 8-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements
The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements
Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements
Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and

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on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

Variance for FIT Requirements
KMG also respectfully requests a variance to Onshore Order 2, Section III, Part Bi, for the pressure integrity test (PIT, also known as a formation integrity test (FIT)). This well is not an exploratory well and is being drilled in an area where the formation integrity is well known. Additionally, when an FIT is run with the mud weight as required, the casing shoe frequently breaks down and causes subsequent lost circulation when drilling the entire depth of the well.

Conclusion
The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

10. Other Information:

Please refer to the attached Drilling Program.

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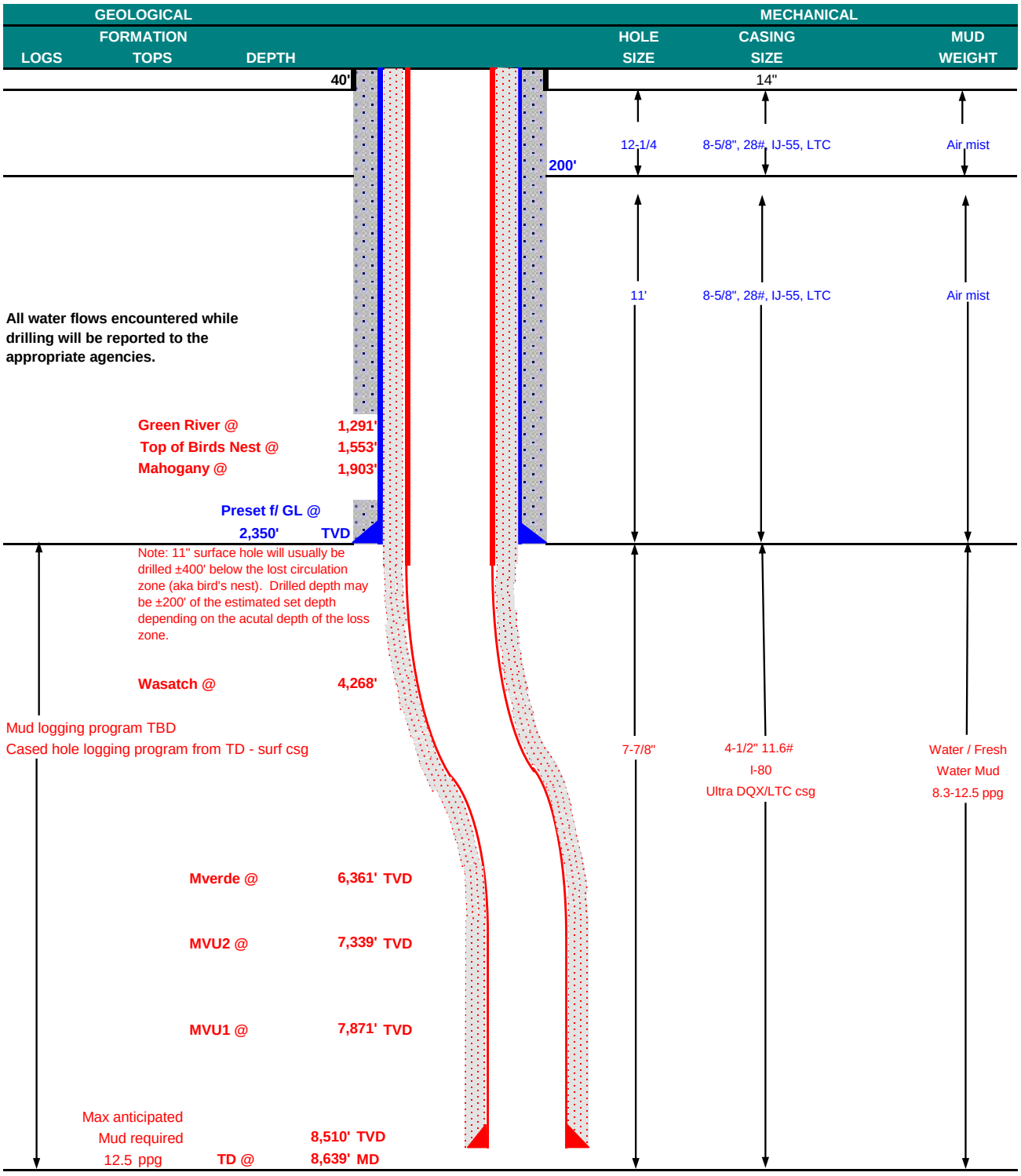
KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP		DATE	October 14, 2011	
WELL NAME	**BONANZA 1023-5L4AS**		TD	8,510' TVD	8,639' MD
FIELD	Natural Buttes	COUNTY Uintah	STATE Utah	FINISHED ELEVATION	5327.3
SURFACE LOCATION	NESW 1951 FSL	1965 FWL	Sec 5	T 10S	R 23E
	Latitude: 39.976056	Longitude: -109.353112		NAD 83	
BTM HOLE LOCATION	NWSW 1865 FSL	1083 FWL	Sec 5	T 10S	R 23E
	Latitude: 39.975818	Longitude: -109.356258		NAD 83	
OBJECTIVE ZONE(S)	Wasatch/Mesaverde				
ADDITIONAL INFO	Regulatory Agencies: BLM (Minerals), BLM (Surface), UDOGM Tri-County Health Dept.				



KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL			WT.	GR.	CPLG.	DESIGN FACTORS BURST	COLLAPSE	LTC	DQX TENSION
CONDUCTOR	14"	0-40'									
								3,390	1,880	348,000	N/A
SURFACE	8-5/8"	0	to	2,350	28.00	IJ-55	LTC	2.30	1.71	6.04	N/A
								7,780	6,350	223,000	267,035
PRODUCTION	4-1/2"	0	to	5,000	11.60	I-80	DQX	1.11	1.15		3.29
	4-1/2"	5,000	to	8,639'	11.60	I-80	LTC	1.11	1.15	6.53	

Surface Casing:

(Burst Assumptions: TD = 12.5 ppg) 0.73 psi/ft = frac gradient @ surface shoe

Fracture at surface shoe with 0.1 psi/ft gas gradient above

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

Production casing:

(Burst Assumptions: Pressure test with 8.4ppg @ 7000 psi) 0.64 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT	YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80	1.15
Option 1			+ 0.25 pps flocele				
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80	1.15
			+ 2% CaCl + 0.25 pps flocele				
SURFACE			**NOTE: If well will circulate water to surface, option 2 will be utilized**				
Option 2	LEAD	1,850'	65/35 Poz + 6% Gel + 10 pps gilsonite	170	35%	11.00	3.82
			+ 0.25 pps Flocele + 3% salt BWOW				
	TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80	1.15
			+ 0.25 pps flocele				
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80	1.15
PRODUCTION	LEAD	3,759'	Premium Lite II +0.25 pps	280	20%	11.00	3.38
			celloflake + 5 pps gilsonite + 10% gel				
			+ 0.5% extender				
	TAIL	4,880'	50/50 Poz/G + 10% salt + 2% gel	1,150	35%	14.30	1.31
			+ 0.1% R-3				

*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe
PRODUCTION	Float shoe, 1 jt, float collar. No centralizers will be used.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

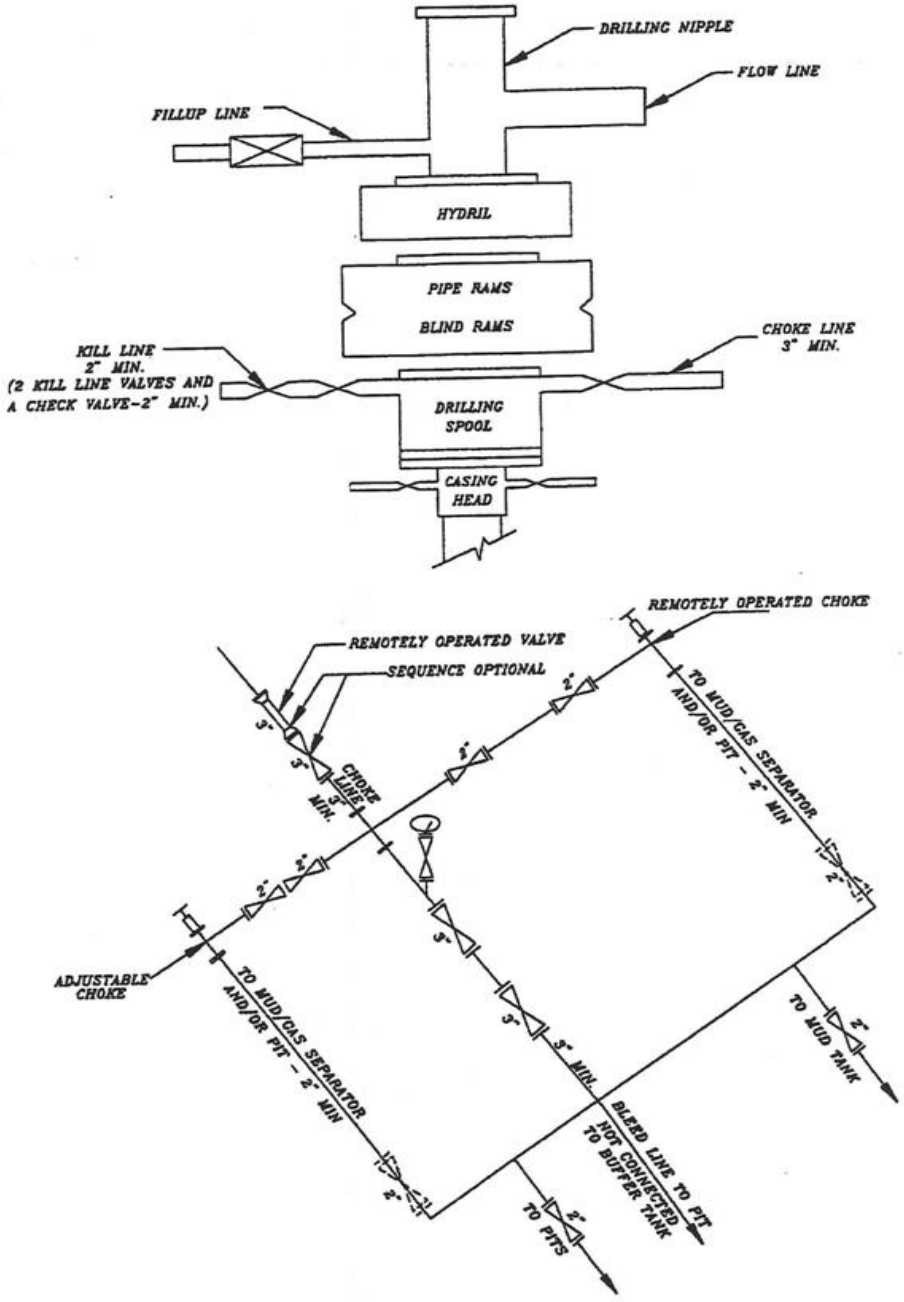
Surveys will be taken at 1,000' minimum intervals.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER: Nick Spence / Danny Showers / Chad Loesel **DATE:**

DRILLING SUPERINTENDENT: Kenny Gathings / Lovel Young **DATE:**

EXHIBIT A
BONANZA 1023-5L4AS

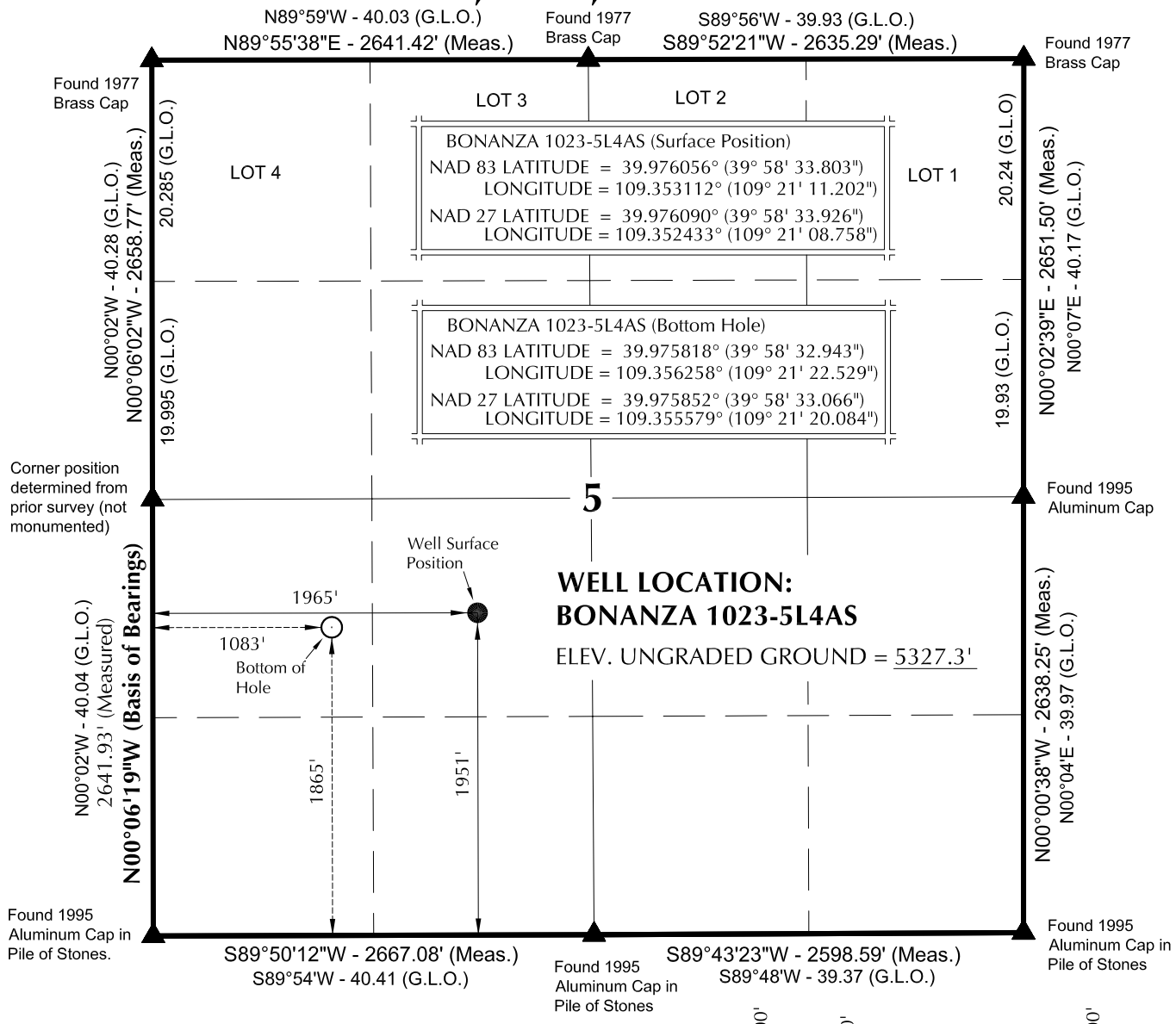


SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

RECEIVED: October 17, 2011

API Well Number: 43047520680000

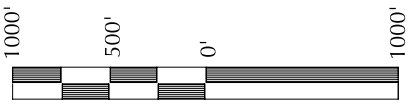
T10S, R23E, S.L.B.&M.



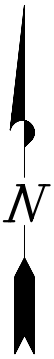
NOTES:

▲ = Section Corners Located

1. Well footages are measured at right angles to the Section Lines.
2. G.L.O. distances are shown in feet or chains. 1 chain = 66 feet.
3. The Bottom of hole bears S84°17'48"W 886.28' from the Surface Position.
4. Bearings are based on Global Positioning Satellite observations.
5. Basis of elevation is Tri-Sta "Two Water" located in the NW ¼ of Section 1, T10S, R21E, S.L.B.&M. The elevation of this Tri-Sta is shown on the Big Pack Mtn NE 7.5 Min. Quadrangle as being 5238'.

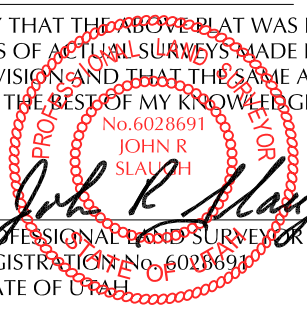


SCALE



SURVEYOR'S CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.



PROFESSIONAL LAND SURVEYOR
REGISTRATION No. 6028691
STATE OF UTAH

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street - Denver, Colorado 80202

WELL PAD - BONANZA 1023-5K

BONANZA 1023-5L4AS
WELL PLAT
1865' FSL, 1083' FWL (Bottom Hole)
NW ¼ SW ¼ OF SECTION 5, T10S, R23E, S.L.B.&M., UINTAH COUNTY, UTAH.

609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

TIMBERLINE (435) 789-1365
ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE SURVEYED: 03-04-10	SURVEYED BY: M.S.B.	SHEET NO: 1
DATE DRAWN: 03-05-10	DRAWN BY: E.M.S.	1 OF 22
SCALE: 1" = 1000'	Date Last Revised:	

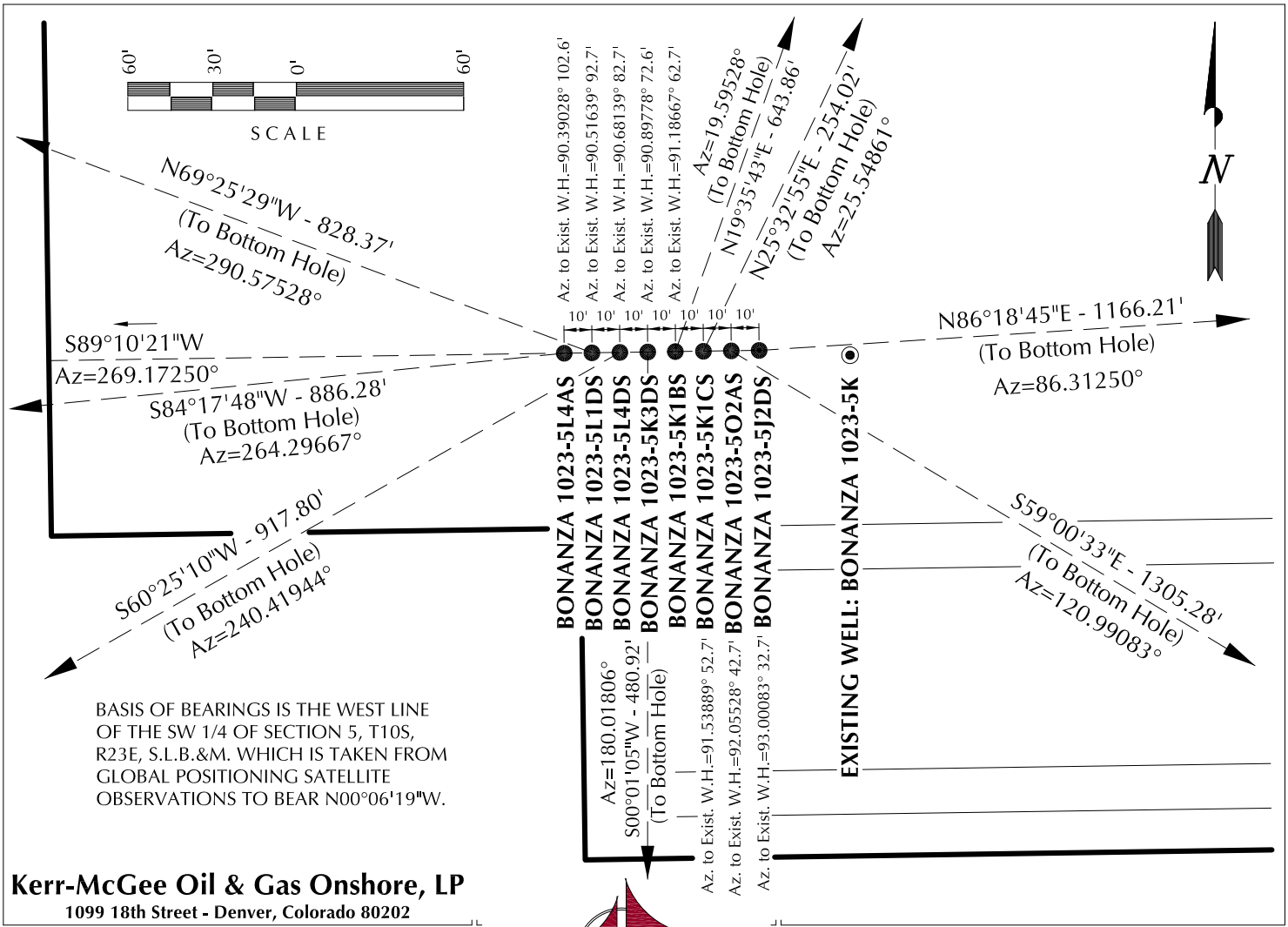
RECEIVED: October 17, 2011

API Well Number: 43047520680000

WELL NAME	SURFACE POSITION					BOTTOM HOLE				
	NAD83		NAD27			NAD83		NAD27		
	LATITUDE	LONGITUDE	LATITUDE	LONGITUDE	FOOTAGES	LATITUDE	LONGITUDE	LATITUDE	LONGITUDE	FOOTAGES
BONANZA 1023-5L4AS	39°58'33.803" 39.976056°	109°21'11.202" 109.353112°	39°58'33.926" 39.976090°	109°21'08.758" 109.352433°	1951' FSL 1965' FWL	39°58'32.943" 39.975818°	109°21'22.529" 109.356258°	39°58'33.066" 39.975852°	109°21'20.084" 109.355579°	1865' FSL 1083' FWL
BONANZA 1023-5L1DS	39°58'33.804" 39.976057°	109°21'11.074" 109.353076°	39°58'33.927" 39.976091°	109°21'08.630" 109.352397°	1951' FSL 1975' FWL	39°58'36.690" 39.976858°	109°21'21.029" 109.355841°	39°58'36.813" 39.976892°	109°21'18.585" 109.355162°	2244' FSL 1200' FWL
BONANZA 1023-5L4DS	39°58'33.805" 39.976057°	109°21'10.946" 109.353041°	39°58'33.928" 39.976091°	109°21'08.502" 109.352362°	1951' FSL 1985' FWL	39°58'29.339" 39.974816°	109°21'21.203" 109.355890°	39°58'29.462" 39.974850°	109°21'18.758" 109.355211°	1500' FSL 1186' FWL
BONANZA 1023-5K3DS	39°58'33.807" 39.976057°	109°21'10.817" 109.353005°	39°58'33.930" 39.976092°	109°21'08.373" 109.352326°	1951' FSL 1995' FWL	39°58'29.055" 39.974738°	109°21'10.827" 109.353007°	39°58'29.178" 39.974772°	109°21'08.383" 109.352329°	1470' FSL 1994' FWL
BONANZA 1023-5K1BS	39°58'33.808" 39.976058°	109°21'10.690" 109.352969°	39°58'33.931" 39.976092°	109°21'08.246" 109.352290°	1951' FSL 2005' FWL	39°58'39.799" 39.977722°	109°21'07.907" 109.352196°	39°58'39.921" 39.977756°	109°21'05.463" 109.351517°	2557' FSL 2222' FWL
BONANZA 1023-5K1CS	39°58'33.809" 39.976058°	109°21'10.560" 109.352933°	39°58'33.932" 39.976092°	109°21'08.116" 109.352254°	1951' FSL 2015' FWL	39°58'36.072" 39.976687°	109°21'09.150" 109.352542°	39°58'36.195" 39.976721°	109°21'06.706" 109.351863°	2180' FSL 2125' FWL
BONANZA 1023-5O2AS	39°58'33.810" 39.976058°	109°21'10.432" 109.352898°	39°58'33.933" 39.976093°	109°21'07.988" 109.352219°	1951' FSL 2025' FWL	39°58'27.156" 39.974210°	109°20'56.074" 109.348909°	39°58'27.279" 39.974244°	109°20'53.630" 109.348231°	1275' FSL 2125' FEL
BONANZA 1023-5J2DS	39°58'33.812" 39.976059°	109°21'10.303" 109.352862°	39°58'33.935" 39.976093°	109°21'07.859" 109.352183°	1951' FSL 2035' FWL	39°58'34.539" 39.976261°	109°20'55.357" 109.348710°	39°58'34.661" 39.976295°	109°20'52.913" 109.348031°	2022' FSL 2070' FEL
BONANZA 1023-5K	39°58'33.795" 39.976054°	109°21'09.884" 109.352746°	39°58'33.918" 39.976088°	109°21'07.440" 109.352067°	1950' FSL 2068' FWL					

RELATIVE COORDINATES - From Surface Position to Bottom Hole

WELL NAME	NORTH	EAST	WELL NAME	NORTH	EAST	WELL NAME	NORTH	EAST	WELL NAME	NORTH	EAST
BONANZA 1023-5L4AS	-88.1'	-881.9'	**BONANZA 1023-5L1DS**	291.1'	-775.5'	**BONANZA 1023-5L4DS**	-453.1'	-798.2'	**BONANZA 1023-5K3DS**	-480.9'	-0.2'
BONANZA 1023-5K1BS	606.6'	215.9'	**BONANZA 1023-5K1CS**	229.2'	109.6'	**BONANZA 1023-5O2AS**	-672.1'	1118.9'	**BONANZA 1023-5J2DS**	75.0'	1163.8'



BASIS OF BEARINGS IS THE WEST LINE OF THE SW 1/4 OF SECTION 5, T10S, R23E, S.L.B.&M. WHICH IS TAKEN FROM GLOBAL POSITIONING SATELLITE OBSERVATIONS TO BEAR N00°06'19"W.

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street - Denver, Colorado 80202

WELL PAD - BONANZA 1023-5K

WELL PAD INTERFERENCE PLAT
WELLS - BONANZA 1023-5L4AS, BONANZA 1023-5L1DS, BONANZA 1023-5L4DS, BONANZA 1023-5K3DS, BONANZA 1023-5K1BS, BONANZA 1023-5K1CS, BONANZA 1023-5O2AS & BONANZA 1023-5J2DS
LOCATED IN SECTION 5, T10S, R23E, S.L.B.&M., UINTAH COUNTY, UTAH.

609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan WY 82801
Phone 307-674-0609
Fax 307-674-0182

TIMBERLINE (435) 789-1365
ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE SURVEYED: 03-04-10	SURVEYED BY: M.S.B.	SHEET NO: **9**
DATE DRAWN: 03-05-10	DRAWN BY: E.M.S.	9 OF 20
SCALE: 1" = 60'	Date Last Revised:	

RECEIVED: October 17, 2011

EXISTING ACCESS ROAD
EXISTING 4" GAS PIPELINE (TO BE UPGRADED)
8" GAS LINE
6" LIQUID LINE
6" LIQUID LINE
TOPSOIL STOCKPILE
S59°00'33"E - 1305.28' (TO BOTTOM HOLE)
EXISTING WELL PAD
N86°18'45"E - 1166.21' (TO BOTTOM HOLE)
RECLAIMED PIT
RESERVE PIT 12' DEPTH SLOPE 1.5:1
RESERVE PIT & EXCESS CUT STOCKPILE
N25°32'55"E - 254.02' (TO BOTTOM HOLE)
N19°35'43"E - 643.86' (TO BOTTOM HOLE)
EXISTING WELL: BONANZA 1023-5K
BONANZA 1023-5J2DS
BONANZA 1023-5O2AS
BONANZA 1023-5K1CS
BONANZA 1023-5K1BS
BONANZA 1023-5K3DS
BONANZA 1023-5L4DS
BONANZA 1023-5L1DS
BONANZA 1023-5L4AS
BOILER
GENERATOR
DIESEL TANK
MUD PUMP 1
MUD PUMP 2
MUD TANK
SHAKER TANK
WATER TANK
PIPERACKS
PIPETUBS
EXISTING METHANOL TANK
EXISTING METER/ SEPARATOR
DERRICK STAND
EXISTING TANK AND BERM
MOVE EXISTING TOPSOIL PILE TO PROPOSED LOCATION
TOPSOIL STOCKPILE
CUT
FILL
N69°25'29"W - 828.37' (TO BOTTOM HOLE)
S84°17'48"W - 886.28' (TO BOTTOM HOLE)
S60°25'10"W - 917.90' (TO BOTTOM HOLE)
S00°01'05"W - 480.92' (TO BOTTOM HOLE)
PLEASE NOTE: LOCATIONS OF PROPOSED PIPELINES DISPLAYED WITHIN THE PAD AREA ARE FOR VISUALIZATION PURPOSES ONLY. ACTUAL LOCATIONS TO BE DETERMINED DURING CONSTRUCTION.

WELL PAD - BONANZA 1023-5K DESIGN SUMMARY

EXISTING GRADE @ CENTER OF WELL PAD = 5327.3'
FINISHED GRADE ELEVATION = 5326.5'
CUT SLOPES = 1.5:1
FILL SLOPES = 1.5:1
TOTAL WELL PAD AREA = 3.65 ACRES
TOTAL DAMAGE AREA = 6.64 ACRES
SHRINKAGE FACTOR = 1.10
SWELL FACTOR = 1.00

WELL PAD QUANTITIES

TOTAL CUT FOR WELL PAD = 8,171 C.Y.
TOTAL FILL FOR WELL PAD = 5,637 C.Y.
TOPSOIL @ 6" DEPTH = 1,812 C.Y.
EXCESS MATERIAL = 2,534 C.Y.

RESERVE PIT QUANTITIES

TOTAL CUT FOR RESERVE PIT
+/- 9,680 CY
RESERVE PIT CAPACITY (2' OF FREEBOARD)
+/- 36,950 BARRELS

WELL PAD LEGEND

- EXISTING WELL LOCATION
- PROPOSED WELL LOCATION
- PROPOSED BOTTOM HOLE LOCATION
- EXISTING CONTOURS (2' INTERVAL)
- PROPOSED CONTOURS (2' INTERVAL)
- PPL — PROPOSED PIPELINE
- EPL — EXISTING PIPELINE

HORIZONTAL 0 30 60 1" = 60'
2' CONTOURS

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street - Denver, Colorado 80202

WELL PAD - BONANZA 1023-5K

WELL PAD - LOCATION LAYOUT
BONANZA 1023-5L4AS, BONANZA 1023-5L1DS, BONANZA 1023-5L4DS, BONANZA 1023-5K3DS, BONANZA 1023-5K1BS, BONANZA 1023-5K1CS, BONANZA 1023-5O2AS & BONANZA 1023-5J2DS
LOCATED IN SECTION 5, T10S, R23E, S.L.B.&M., UINTAH COUNTY, UTAH

609 CONSULTING, LLC
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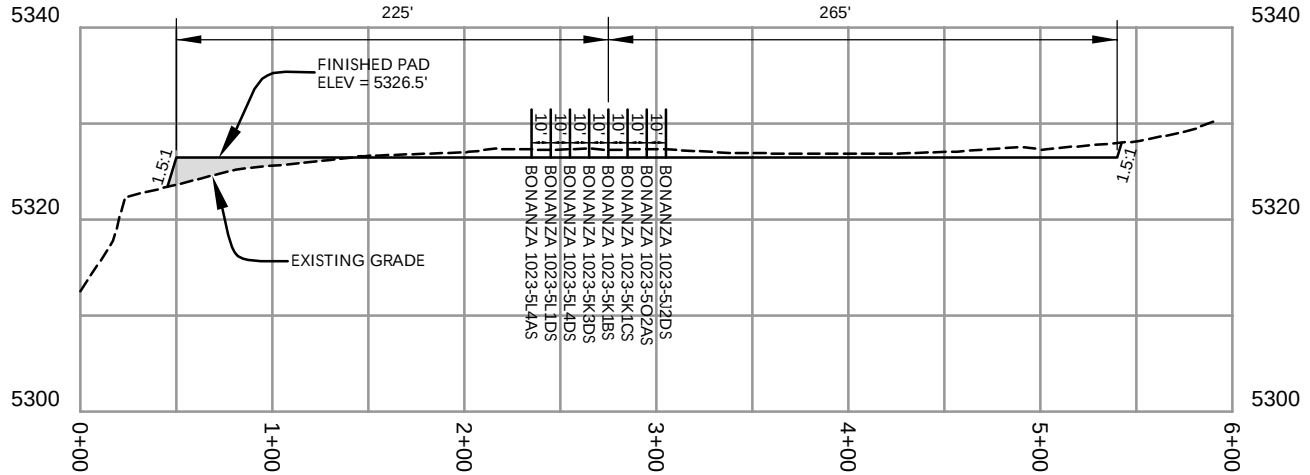
Fax 307-674-0182

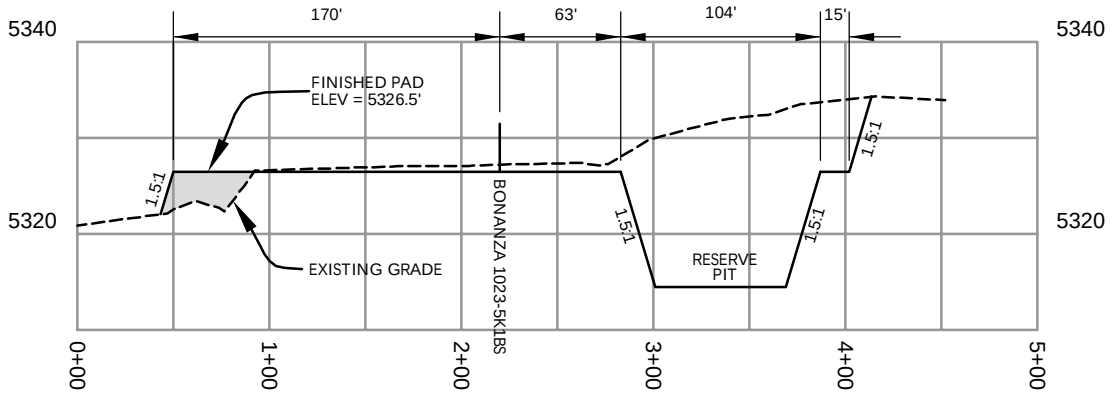
TIMBERLINE ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078
(435) 789-1365

Scale: 1"=60' | Date: 3/30/10 | SHEET NO: 10 | 10 OF 20
REVISED: SEA 6/25/10

API Well Number: 43047520680000



CROSS SECTION A-A'



CROSS SECTION B-B'

NOTE: CROSS SECTION B-B' DEPICTS MAXIMUM RESERVE PIT DEPTH.

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street - Denver, Colorado 80202

WELL PAD - BONANZA 1023-5K

WELL PAD - CROSS SECTIONS
BONANZA 1023-5L4AS, BONANZA 1023-5L1DS,
BONANZA 1023-5L4DS, BONANZA 1023-5K3DS,
BONANZA 1023-5K1BS, BONANZA 1023-5K1CS,
BONANZA 1023-5O2AS & BONANZA 1023-5J2DS
LOCATED IN SECTION 5, T10S, R23E,
S.L.B.&M., UINTAH COUNTY, UTAH

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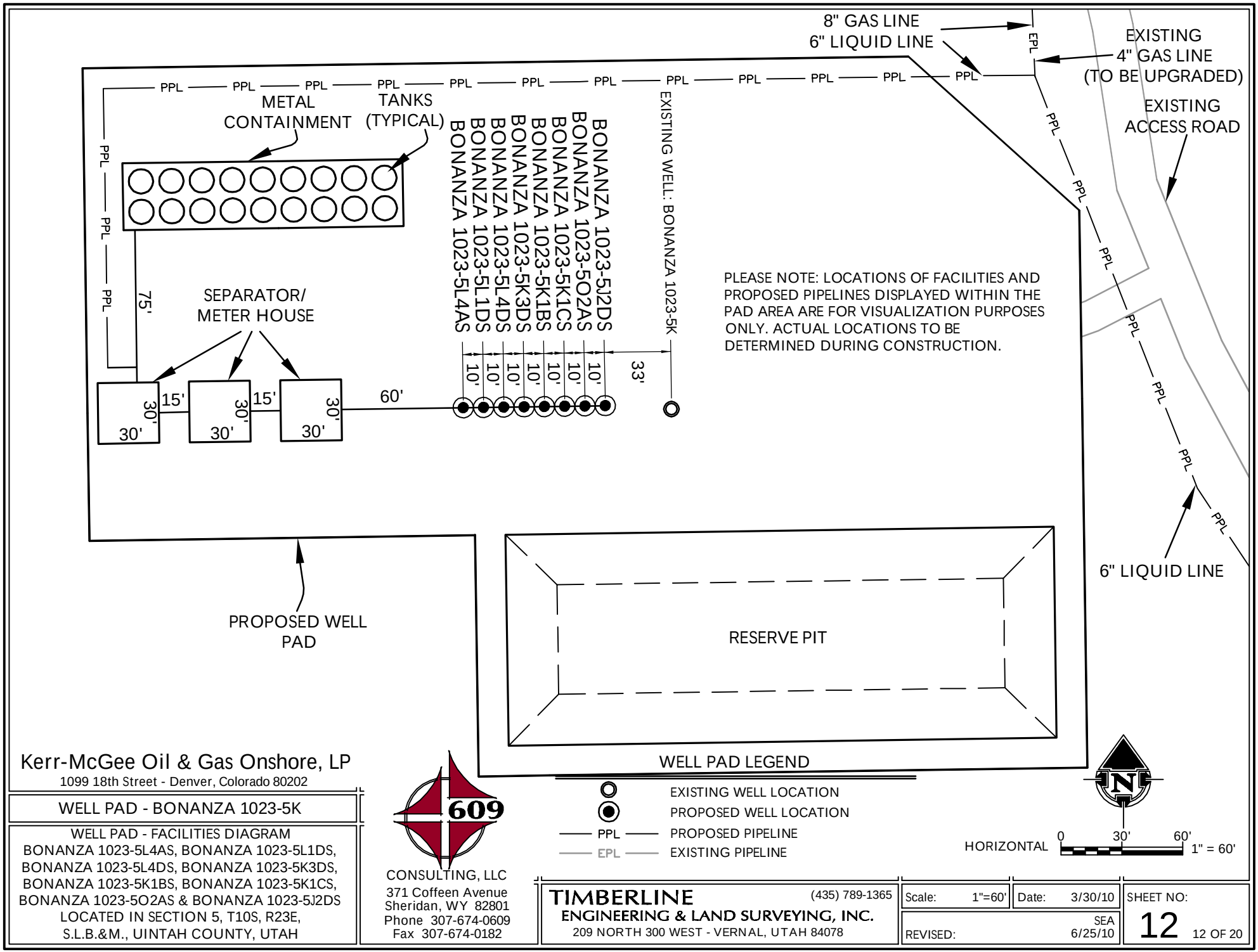
HORIZONTAL 0 50 100 1" = 100'
VERTICAL 0 10 20 1" = 20'

TIMBERLINE (435) 789-1365
ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

Scale: 1"=100'	Date: 3/30/10	SHEET NO: 11
REVISED:	SEA 6/25/10	11 OF 20

K:\ANADARKO\2010_11_BON_FOCUS_SEC_5-1023\DWGS\BONANZA 1023-5K\1023-5K_20100601.dwg, 7/28/2010 10:11:07 AM

API Well Number: 43047520680000



Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street - Denver, Colorado 80202

WELL PAD - BONANZA 1023-5K

WELL PAD - FACILITIES DIAGRAM
BONANZA 1023-5L4AS, BONANZA 1023-5L1DS,
BONANZA 1023-5L4DS, BONANZA 1023-5K3DS,
BONANZA 1023-5K1BS, BONANZA 1023-5K1CS,
BONANZA 1023-5O2AS & BONANZA 1023-5J2DS
LOCATED IN SECTION 5, T10S, R23E,
S.L.B.&M., UINTAH COUNTY, UTAH

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TIMBERLINE ENGINEERING & LAND SURVEYING, INC.
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Scale: 1"=60' | Date: 3/30/10 | SHEET NO: 12 12 OF 20
REVISED: SEA 6/25/10

K:\ANADARKO\2010_11_BON_FOCUS_SEC_5-1023\DWGS\BONANZA_1023-5K\1023-5K_20100601.dwg, 7/28/2010 10:11:47 AM

RECEIVED: October 17, 2011

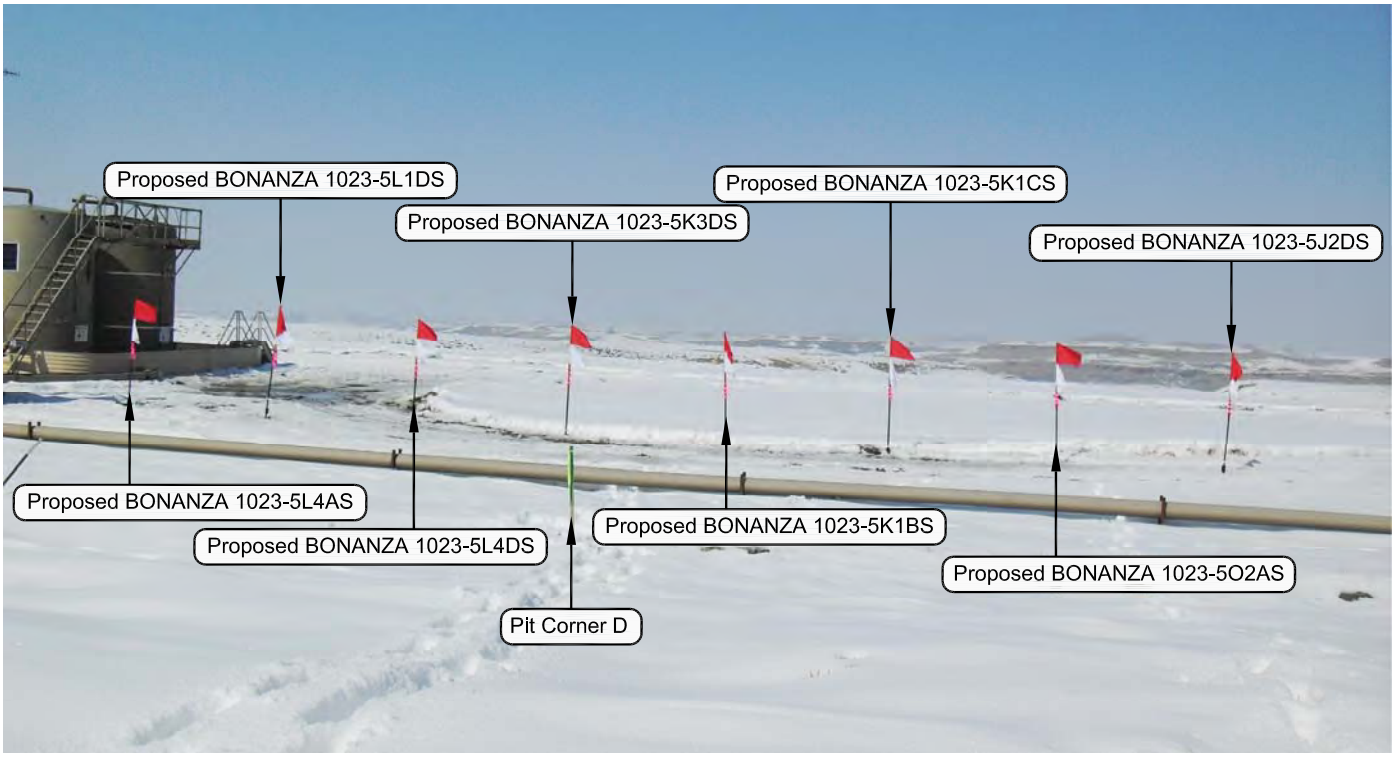

PHOTO VIEW: FROM PIT CORNER D TO LOCATION STAKES **CAMERA ANGLE: NORTHWESTERLY**

PHOTO VIEW: FROM EXISTING ROAD **CAMERA ANGLE: SOUTHWESTERLY**

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street - Denver, Colorado 80202

Well Pad - BONANZA 1023-5K

LOCATION PHOTOS
BONANZA 1023-5L4AS, BONANZA 1023-5L1DS, BONANZA 1023-5L4DS, BONANZA 1023-5K3DS, BONANZA 1023-5K1BS, BONANZA 1023-5K1CS, BONANZA 1023-5O2AS & BONANZA 1023-5J2DS
LOCATED IN SECTION 5, T10S, R23E, S.L.B.&M., UINTAH COUNTY, UTAH.

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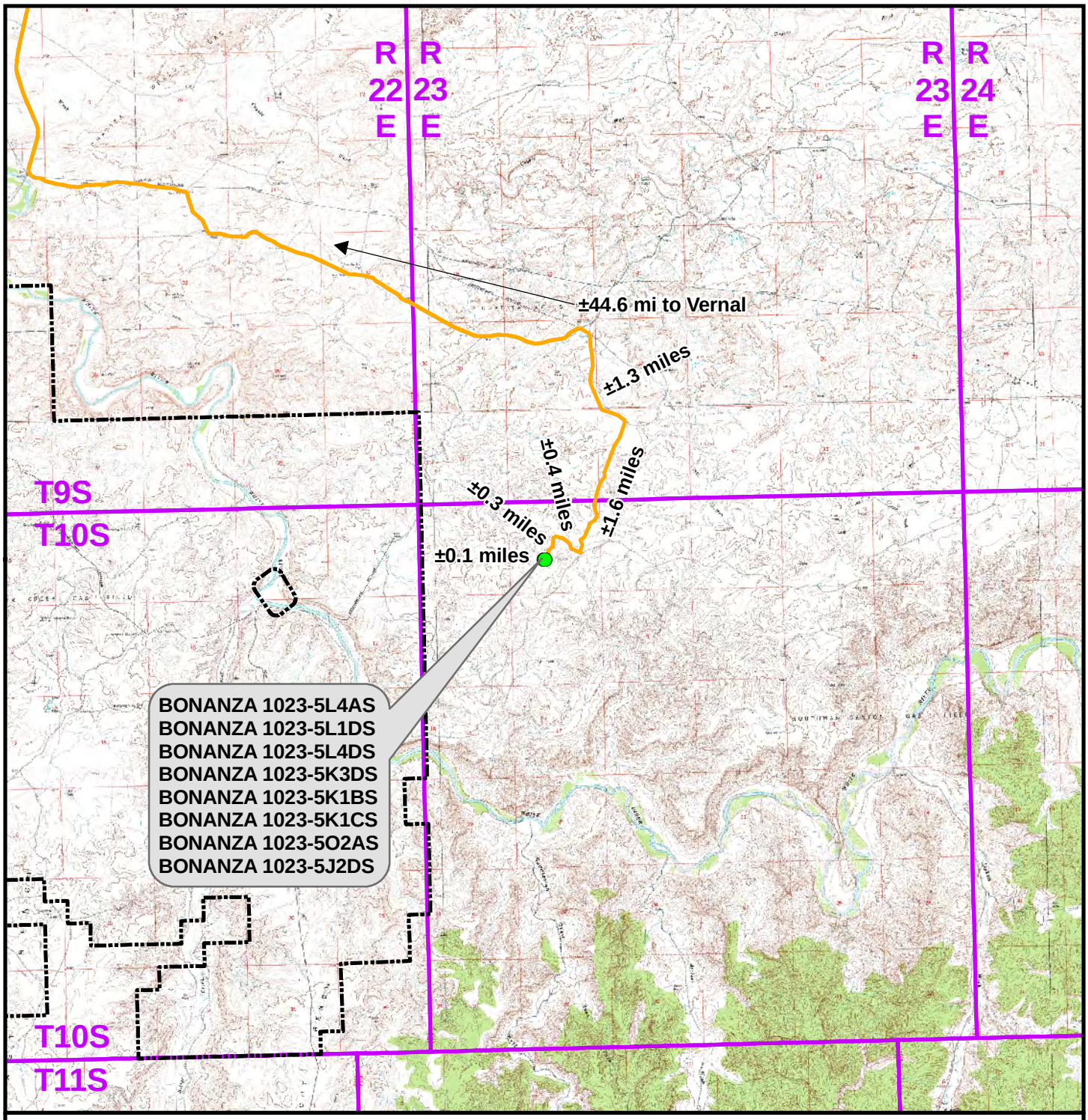
TIMBERLINE (435) 789-1365
ENGINEERING & LAND SURVEYING, INC.
209 NORTH 300 WEST - VERNAL, UTAH 84078

DATE PHOTOS TAKEN: 03-04-10	PHOTOS TAKEN BY: M.S.B.	SHEET NO: 13
DATE DRAWN: 03-05-10	DRAWN BY: E.M.S.	13 OF 20
Date Last Revised:		

RECEIVED: October 17, 2011

API Well Number: 43047520680000



Legend

Distance From Well Pad - BONANZA 1023-5K To Unit Boundary: ±7,305ft

Proposed Well Location

Natural Buttes Unit Boundary

Access Route - Proposed

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street, Denver, Colorado 80202

WELL PAD - BONANZA 1023-5K

TOPO A
BONANZA 1023-5L4AS, BONANZA 1023-5L1DS,
BONANZA 1023-5L4DS, BONANZA 1023-5K3DS,
BONANZA 1023-5K1BS, BONANZA 1023-5K1CS,
BONANZA 1023-5O2AS & BONANZA 1023-5J2DS
LOCATED IN SECTION 5, T10S, R23E
S.L.B.&M., UINTAH COUNTY, UTAH

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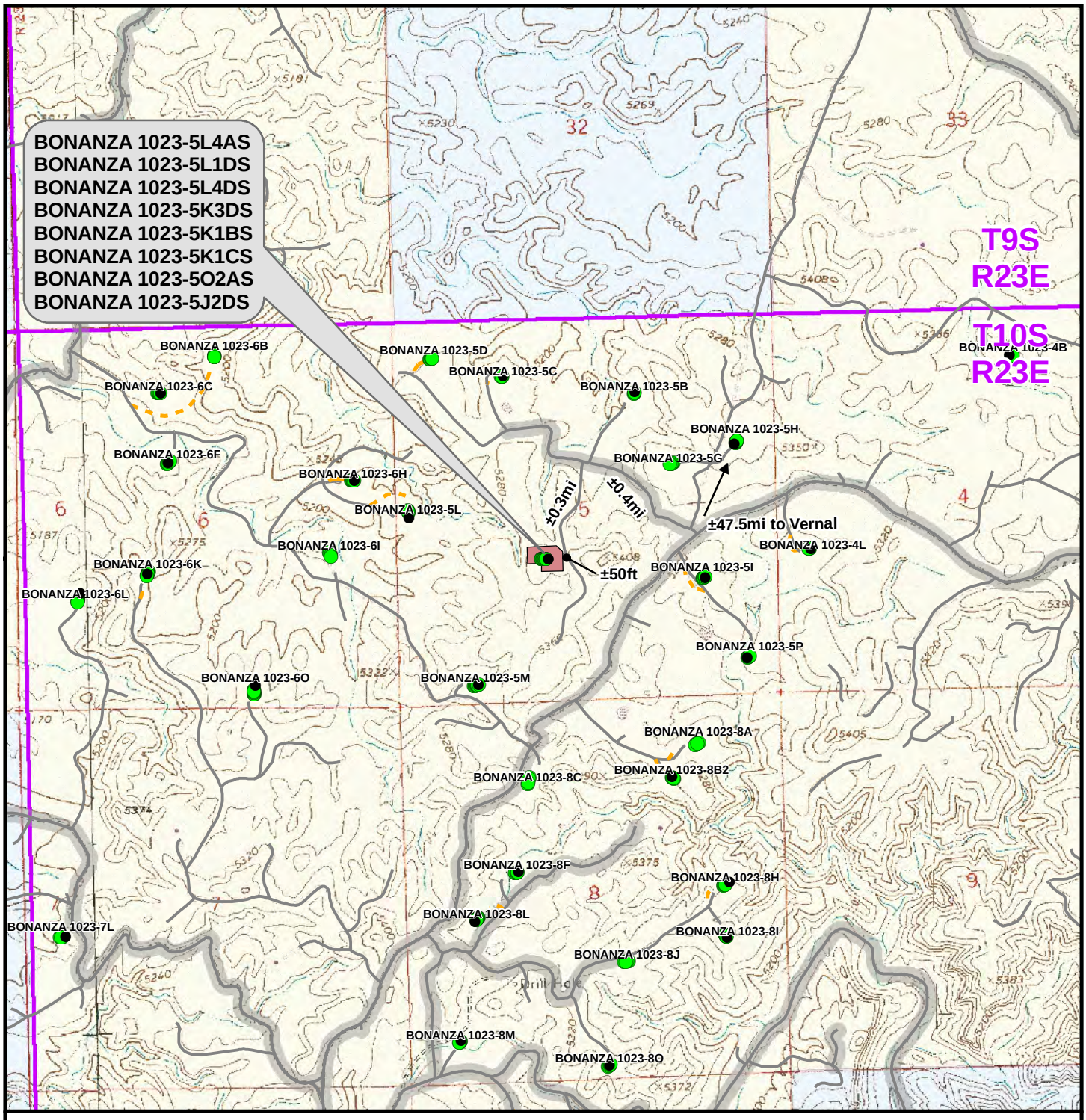
N

Scale: 1:100,000	NAD83 USP Central	Sheet No: 14	14 of 20
Drawn: CPS	Date: 30 Mar 2010		
Revised: CPS	Date: 25 June 2010		

RECEIVED: October 17, 2011



Legend

Total Proposed Road Length: ±0ft

Well - Proposed | Well Pad | Road - Proposed | County Road | Bureau of Land Management | State

Well - Existing | Road - Existing | Indian Reservation | Private

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street, Denver, Colorado 80202

WELL PAD - BONANZA 1023-5K

TOPO B
BONANZA 1023-5L4AS, BONANZA 1023-5L1DS,
BONANZA 1023-5L4DS, BONANZA 1023-5K3DS,
BONANZA 1023-5K1BS, BONANZA 1023-5K1CS,
BONANZA 1023-5O2AS & BONANZA 1023-5J2DS
LOCATED IN SECTION 5, T10S, R23E
S.L.B.&M., UINTAH COUNTY, UTAH

609 CONSULTING, LLC
371 Coffeen Avenue
Sheridan, WY 82801
Phone (307) 674-0609
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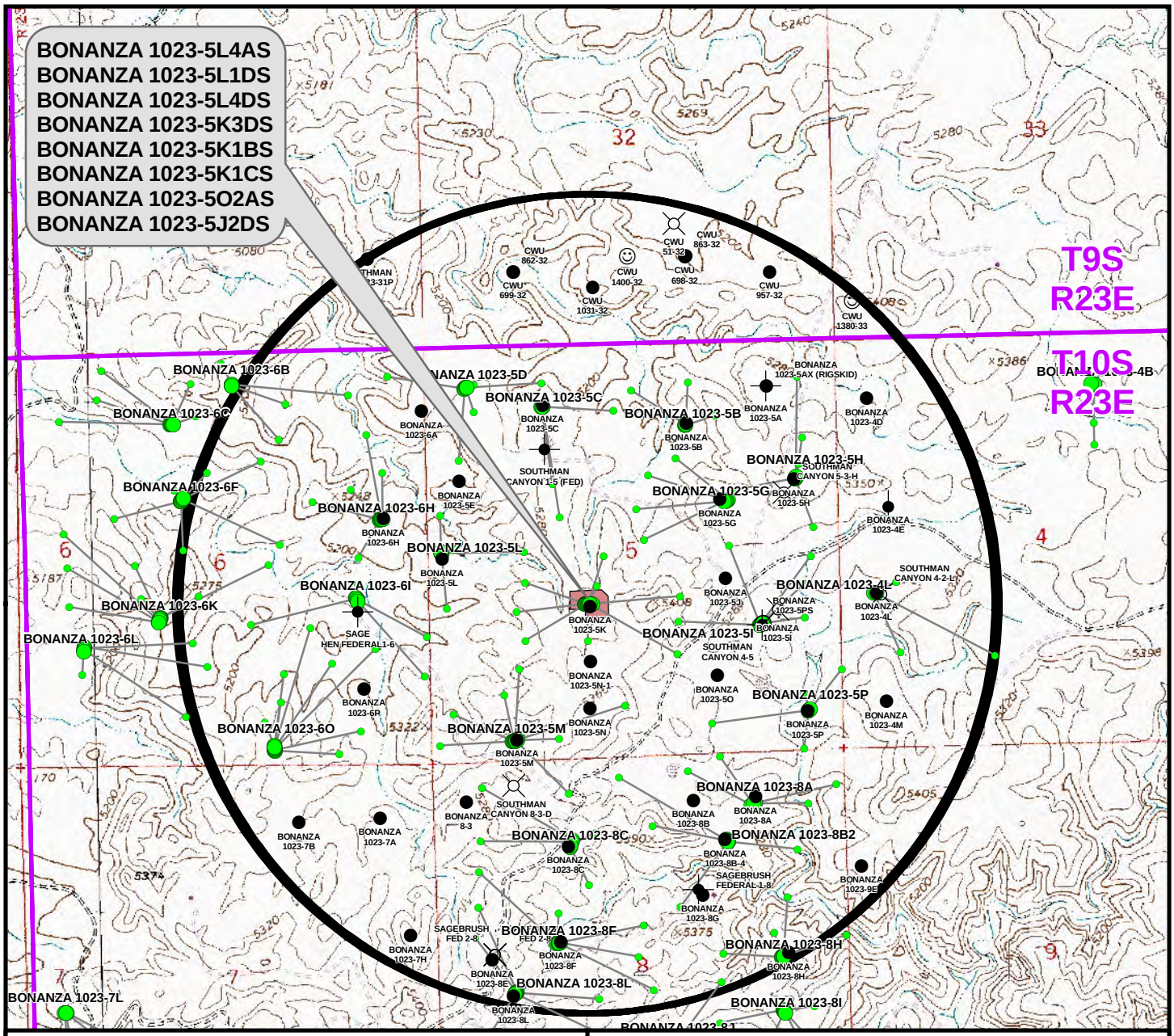
N

Scale: 1" = 2,000ft	NAD83 USP Central	Sheet No: 15 of 20	
Drawn: CPS	Date: 30 Mar 2010		
Revised: CPS	Date: 25 June 2010		

RECEIVED: October 17, 2011

API Well Number: 43047520680000



Proposed Well	Nearest Well Bore	Footage
BONANZA 1023-5L4AS	BONANZA 1023-5K	988ft
BONANZA 1023-5L1DS	BONANZA 1023-5K	916ft
BONANZA 1023-5L4DS	BONANZA 1023-5N-1	886ft
BONANZA 1023-5K3DS	BONANZA 1023-5N-1	268ft

Proposed Well	Nearest Well Bore	Footage
BONANZA 1023-5K1BS	BONANZA 1023-5K	627ft
BONANZA 1023-5K1CS	BONANZA 1023-5K	237ft
BONANZA 1023-5O2AS	BONANZA 1023-5O	588ft
BONANZA 1023-5J2DS	BONANZA 1023-5J	625ft

Legend

- Well - Proposed
- Bottom Hole - Proposed
- Well Path
- Well Pad
- Well - 1 Mile Radius

Well locations derived from State of Utah, Dept. of Natural Resources, Division of Oil, Gas and Mining

- Producing
- Active
- Spudded (Drilling commenced: Not yet completed)
- Approved permit (APD); not yet spudded
- New Permit (Not yet approved or drilled)
- Inactive
- Drilling Operations Suspended
- Temporarily-Abandoned
- Shut-In
- Plugged and Abandoned
- Location Abandoned
- Dry hole marker, buried
- Returned APD (Unapproved)

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street, Denver, Colorado 80202

WELL PAD - BONANZA 1023-5K

TOPO C
BONANZA 1023-5L4AS, BONANZA 1023-5L1DS,
BONANZA 1023-5L4DS, BONANZA 1023-5K3DS,
BONANZA 1023-5K1BS, BONANZA 1023-5K1CS,
BONANZA 1023-5O2AS & BONANZA 1023-5J2DS
LOCATED IN SECTION 5, T10S, R23E
S.L.B.&M., UINTAH COUNTY, UTAH

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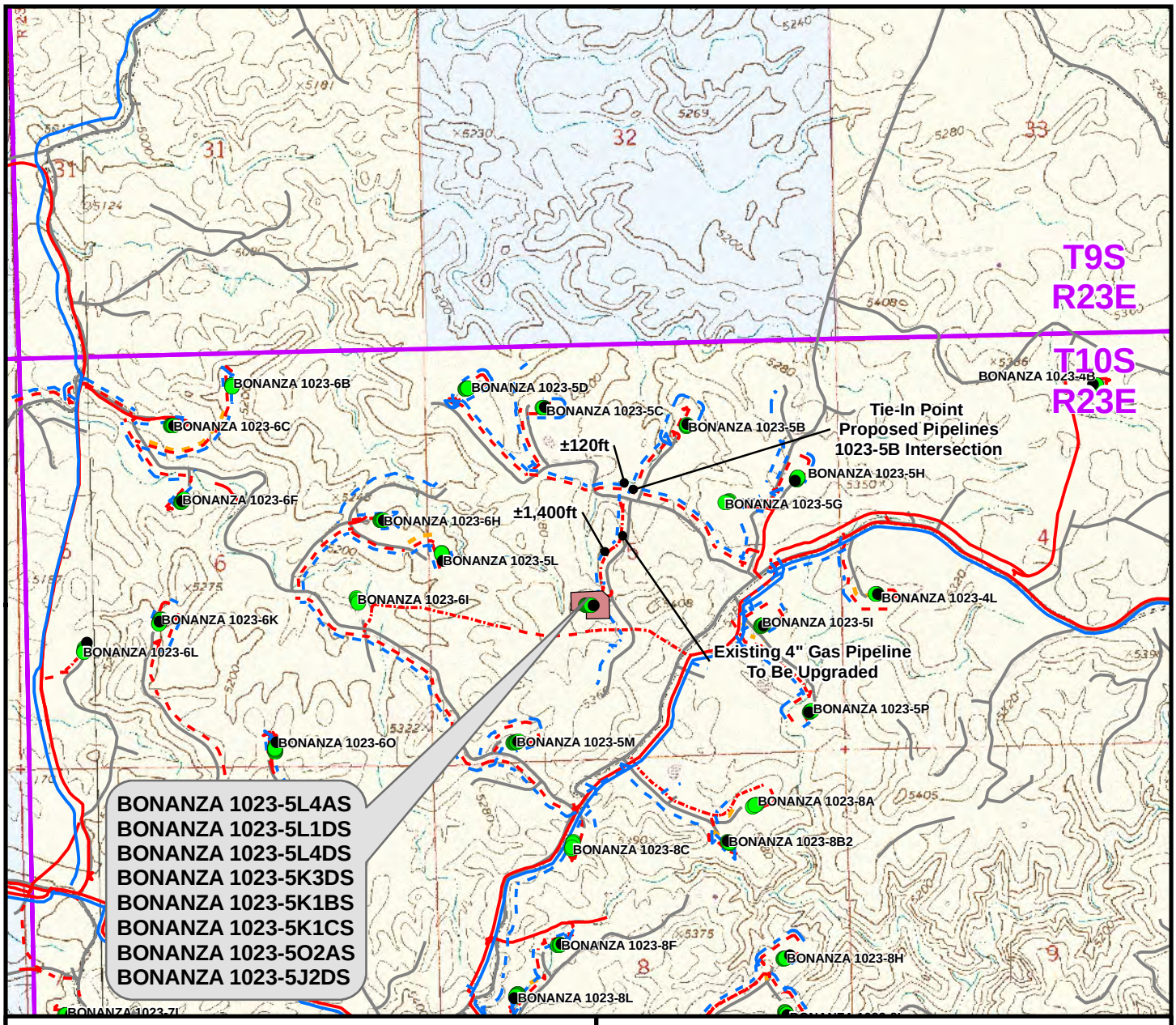
N

Scale: 1" = 2,000ft	NAD83 USP Central	Sheet No: 16 of 20
Drawn: CPS	Date: 30 Mar 2010	
Revised: CPS	Date: 25 June 2010	



Proposed Liquid Pipeline	Length
Proposed 6" (First Meter House to Edge of Pad)	±570ft
Proposed 6" (Edge of Pad to 1023-5B Intersection)	±1,520ft
TOTAL PROPOSED LIQUID PIPELINE =	±2,090ft

Proposed Gas Pipeline	Length
Proposed 8" (First Meter House to Edge of Pad)	±570ft
Proposed 8" (Edge of Pad to Main Road Intersection)	±1,400ft
Proposed 10"(Main Road Intersection to 1023-5B Intersection)	±120ft
TOTAL PROPOSED GAS PIPELINE =	±2,090ft

Legend

Well - Proposed
Well - Existing
Well Pad
Gas Pipeline - Proposed
Gas Pipeline - To Be Upgraded
Gas Pipeline - Existing
Liquid Pipeline - Proposed
Liquid Pipeline - To Be Upgraded
Liquid Pipeline - Existing
Road - Proposed
Road - Existing
Bureau of Land Management
Indian Reservation
State
Private

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street, Denver, Colorado 80202

WELL PAD - BONANZA 1023-5K

TOPO D
BONANZA 1023-5L4AS, BONANZA 1023-5L1DS,
BONANZA 1023-5L4DS, BONANZA 1023-5K3DS,
BONANZA 1023-5K1BS, BONANZA 1023-5K1CS,
BONANZA 1023-5O2AS & BONANZA 1023-5J2DS
LOCATED IN SECTION 5, T10S, R23E
S.L.B.&M., UINTAH COUNTY, UTAH

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N

Scale: 1" = 2,000ft	NAD83 USP Central	Sheet No: 17 of 20
Drawn: CPS	Date: 30 Mar 2010	
Revised: CPS	Date: 25 June 2010	

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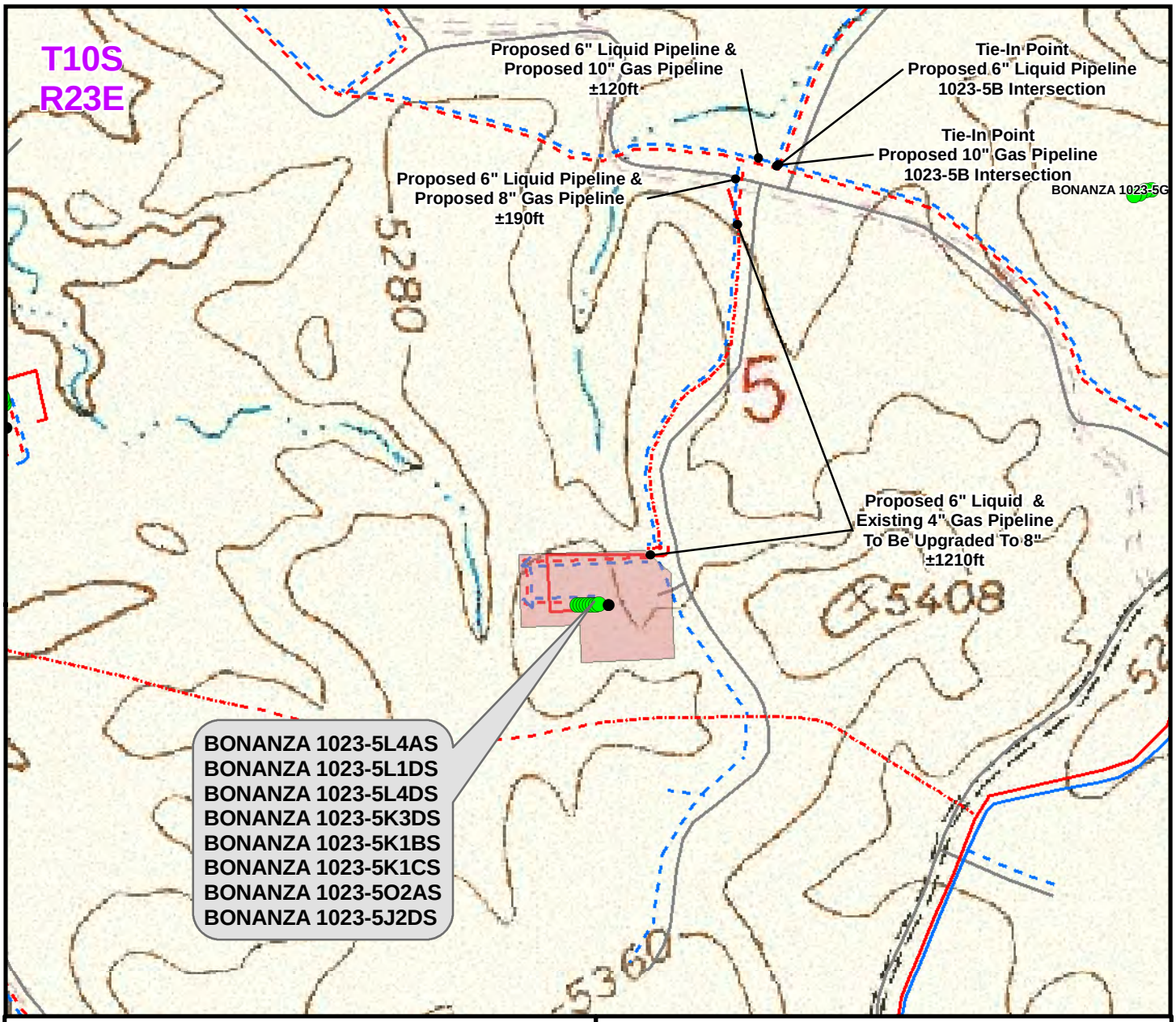

Proposed Liquid Pipeline	Length
Proposed 6" (First Meter House to Edge of Pad)	±570ft
Proposed 6" (Edge of Pad to 1023-5B Intersection)	±1,520ft
TOTAL PROPOSED LIQUID PIPELINE =	±2,090ft

Proposed Gas Pipeline	Length
Proposed 8" (First Meter House to Edge of Pad)	±570ft
Proposed 8" (Edge of Pad to Main Road Intersection)	±1,400ft
Proposed 10"(Main Road Intersection to 1023-5B Intersection)	±120ft
TOTAL PROPOSED GAS PIPELINE =	±2,090ft

Legend

- Well - Proposed
- Well - Existing
- Well Pad
- Gas Pipeline - Proposed
- Gas Pipeline - To Be Upgraded
- Gas Pipeline - Existing
- Liquid Pipeline - Proposed
- Liquid Pipeline - To Be Upgraded
- Liquid Pipeline - Existing
- Road - Proposed
- Road - Existing
- Bureau of Land Management
- Indian Reservation
- State
- Private

Kerr-McGee Oil & Gas Onshore, LP
1099 18th Street, Denver, Colorado 80202

WELL PAD - BONANZA 1023-5K

TOPO D (PAD & PIPELINE DETAIL)
BONANZA 1023-5L4AS, BONANZA 1023-5L1DS,
BONANZA 1023-5L4DS, BONANZA 1023-5K3DS,
BONANZA 1023-5K1BS, BONANZA 1023-5K1CS,
BONANZA 1023-5O2AS & BONANZA 1023-5J2DS
LOCATED IN SECTION 5, T10S, R23E
S.L.B.&M., UINTAH COUNTY, UTAH

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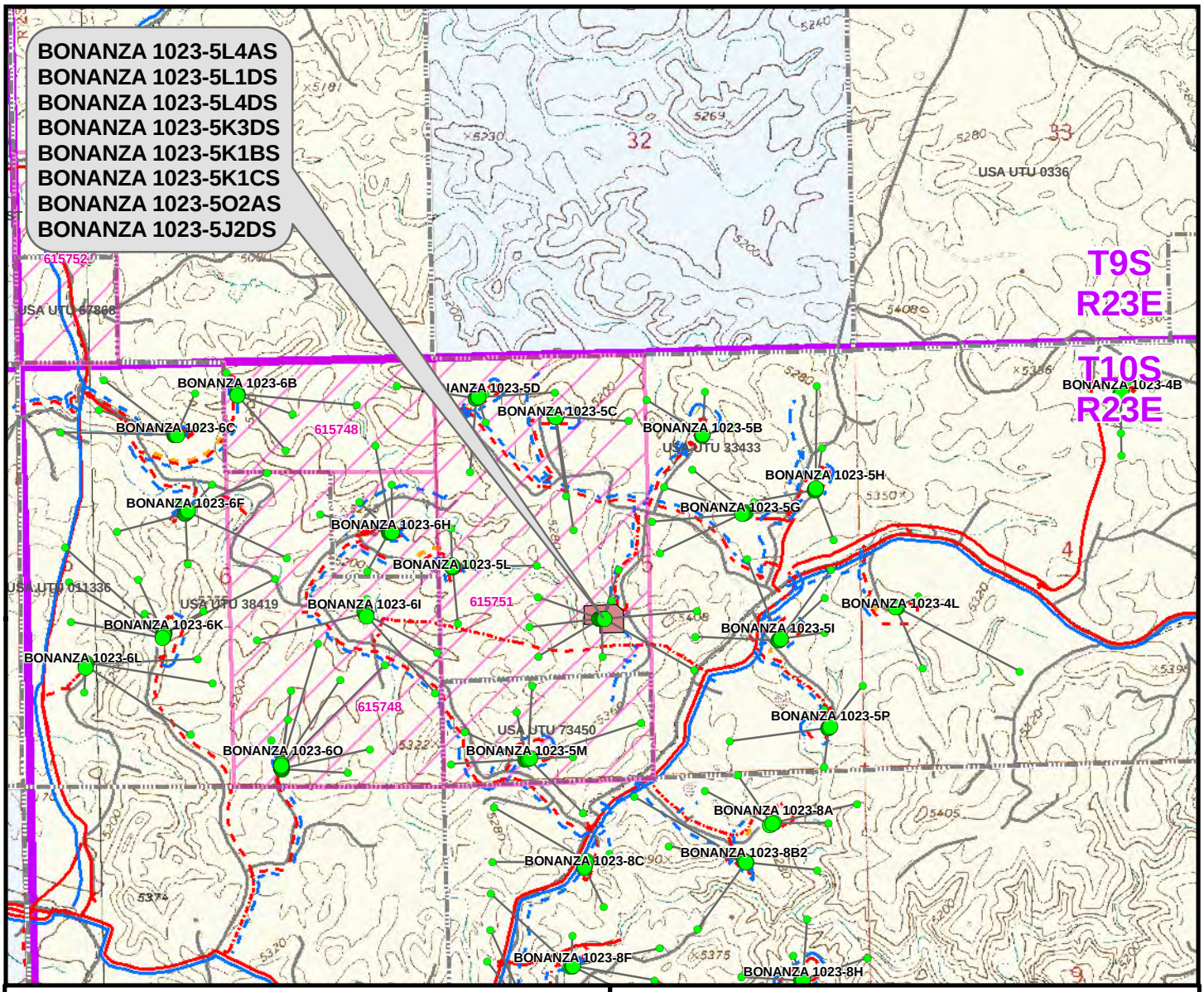
N

Scale: 1" = 500ft	NAD83 USP Central	Sheet No: 18 of 20
Drawn: CPS	Date: 30 Mar 2010	
Revised: CPS	Date: 25 June 2010	

RECEIVED: October 17, 2011

API Well Number: 43047520680000



Proposed Well	Distance to Nearest CA Boundary
BONANZA 1023-5L4AS	1,083ft
BONANZA 1023-5L1DS	1,200ft
BONANZA 1023-5L4DS	1,186ft
BONANZA 1023-5K3DS	666ft
BONANZA 1023-5K1BS	433ft
BONANZA 1023-5K1CS	531ft
BONANZA 1023-5O2AS	482ft
BONANZA 1023-5J2DS	541ft

Proposed Well	Distance To Nearest Lease Boundary
BONANZA 1023-5L4AS	554ft
BONANZA 1023-5L1DS	922ft
BONANZA 1023-5L4DS	178ft
BONANZA 1023-5K3DS	148ft
BONANZA 1023-5K1BS	1,235ft
BONANZA 1023-5K1CS	858ft
BONANZA 1023-5O2AS	482ft
BONANZA 1023-5J2DS	885ft

Legend

- Well - Proposed
- Bottom Hole - Proposed
- Well Path
- Well Pad
- CA Agreement
- Lease Boundary
- Gas Pipeline - Proposed
- Gas Pipeline - To Be Upgraded
- Gas Pipeline - Existing
- Liquid Pipeline - Proposed
- Liquid Pipeline - To Be Upgraded
- Liquid Pipeline - Existing
- Road - Proposed
- Road - Existing
- Bureau of Land Management
- Indian Reservation
- State
- Private

Kerr-McGee Oil & Gas Onshore, LP
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WELL PAD - BONANZA 1023-5K

TOPO E
BONANZA 1023-5L4AS, BONANZA 1023-5L1DS,
BONANZA 1023-5L4DS, BONANZA 1023-5K3DS,
BONANZA 1023-5K1BS, BONANZA 1023-5K1CS,
BONANZA 1023-5O2AS & BONANZA 1023-5J2DS
LOCATED IN SECTION 5, T10S, R23E
S.L.B.&M., UINTAH COUNTY, UTAH

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N

Scale: 1" = 2,000ft	NAD83 USP Central	Sheet No: 19 of 20
Drawn: CPS	Date: 30 Mar 2010	
Revised: CPS	Date: 25 June 2010	

RECEIVED: October 17, 2011

Kerr-McGee Oil & Gas Onshore, LP
WELL PAD – BONANZA 1023-5K
WELLS – BONANZA 1023-5L4AS, BONANZA 1023-5L1DS, BONANZA 1023-5L4DS, BONANZA 1023-5K3DS, BONANZA 1023-5K1BS, BONANZA 1023-5K1CS, BONANZA 1023-5O2AS & BONANZA 1023-5J2DS
Section 5, T10S, R23E, S.L.B.&M.

From the intersection of U.S. Highway 40 and 500 East Street in Vernal, Utah proceed in an easterly then southerly direction along U.S. Highway 40 approximately 3.3 miles to the junction of State Highway 45; exit right and proceed in a southerly direction along State Highway 45 approximately 20.2 miles to the junction of the Glen Bench Road (County B Road 3260). Exit right and proceed in a southwesterly direction along the Glen Bench Road approximately 14.4 miles to the intersection of the Chipeta Wells Road (County B Road 3410) which road intersection is approximately 400 feet northeast of the Mountain Fuel Bridge, at the White River. Exit left and proceed in a southeasterly direction along the Chipeta Wells Road approximately 6.7 miles to a Class D County Road to the right. Exit right and proceed in a southeasterly then southerly direction along the Class D Road approximately 1.3 miles to a second Class D County Road to the right. Exit right and proceed in a southwesterly direction along second Class D Road approximately 1.6 miles to a third Class D County Road to the right. Exit right and proceed in a northwesterly direction along third Class D Road approximately 0.4 miles to a fourth Class D County Road to the left. Exit left and proceed in a southerly direction along fourth Class D Road approximately 0.3 miles to a service road to the right. Exit right and proceed in a westerly direction approximately 50 feet to the proposed well pad.

Total distance from Vernal, Utah to the proposed well location is approximately 48.2 miles in a southerly direction.

RECEIVED: October 17, 2011

ANADARKO PETROLEUM CORP.

UINTAH COUNTY, UTAH (nad 27)
BONANZA 1023-5K PAD
BONANZA 1023-5L4AS

BONANZA 1023-5L4AS

Plan: PLAN #1 4-28-10 RHS

Standard Planning Report

28 April, 2010

RECEIVED: October 17, 2011

API Well Number: 43047520680000

Anadarko Petroleum Corporation

Weatherford

Project: UINTAH COUNTY, UTAH (nad 27)
Site: BONANZA 1023-5K PAD
Well: BONANZA 1023-5L4AS
Wellbore: BONANZA 1023-5L4AS
Section: SECTION 5 T10S R23E
SHL: 1951 FSL 1965 FWL
Design: PLAN #1 4-28-10 RHS
Latitude: 39° 58' 33.924 N
Longitude: 109° 21' 8.759 W
GL: 5327.00
KB: WELL @ 5341.00ft (Original Well Elev)

T M

Azimuths to True North
Magnetic North: 11.17°

Magnetic Field
Strength: 52462.0snT
Dip Angle: 65.93°
Date: 4/28/2010
Model: BGGM2009

LEGEND

- BONANZA 1023-5J2DS, BONANZA 1023-5J2DS, PLAN #1 4-28-10 RHS V0
- Bonanza 1023-5K EXISTING, Bonanza 1023-5K EXISTING, Bonanza 1023-5K EXISTING V0
- BONANZA 1023-5K1BS, BONANZA 1023-5K1BS, PLAN #1 4-28-10 RHS V0
- BONANZA 1023-5K1CS, BONANZA 1023-5K1CS, PLAN #1 4-28-10 RHS V0
- BONANZA 1023-5K3DS, BONANZA 1023-5K3DS, PLAN #1 4-28-10 RHS V0
- BONANZA 1023-5L1DS, BONANZA 1023-5L1DS, PLAN #1 4-28-10 RHS V0
- BONANZA 1023-5L4DS, BONANZA 1023-5L4DS, PLAN #1 4-28-10 RHS V0
- BONANZA 1023-5O2AS, BONANZA 1023-5O2AS, PLAN #1 4-28-10 RHS V0
- PLAN #1 4-28-10 RHS

FORMATION TOP DETAILS

TVDPath	MDPath	Formation
1291.00	1291.56	GREEN RIVER
4268.00	4380.59	WASATCH
7339.00	7468.26	MESAVERDE

CASING DETAILS

TVD	MD	Name	Size
2050.00	2051.03	8 5/8"	8.62

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00
400.00	2.00	264.39	399.98	-0.17	-1.74	2.00	264.39	1.75	Start 1751.09 hold at 400.00 MD
2151.09	2.00	264.39	2150.00	-6.14	-62.56	0.00	0.00	62.86	Start DLS 3.00 TFO -0.01
2751.12	20.00	264.38	2736.58	-17.30	-176.03	3.00	-0.01	176.88	Start 1567.61 hold at 2751.12 MD
4318.72	20.00	264.38	4209.64	-69.76	-709.64	0.00	0.00	713.06	Start Drop -2.00
5318.76	0.00	0.00	5189.50	-86.67	-881.59	2.00	180.00	885.84	Start 3320.50 hold at 5318.76 MD
8639.26	0.00	0.00	8510.00	-86.67	-881.59	0.00	0.00	885.84	TD at 8639.26

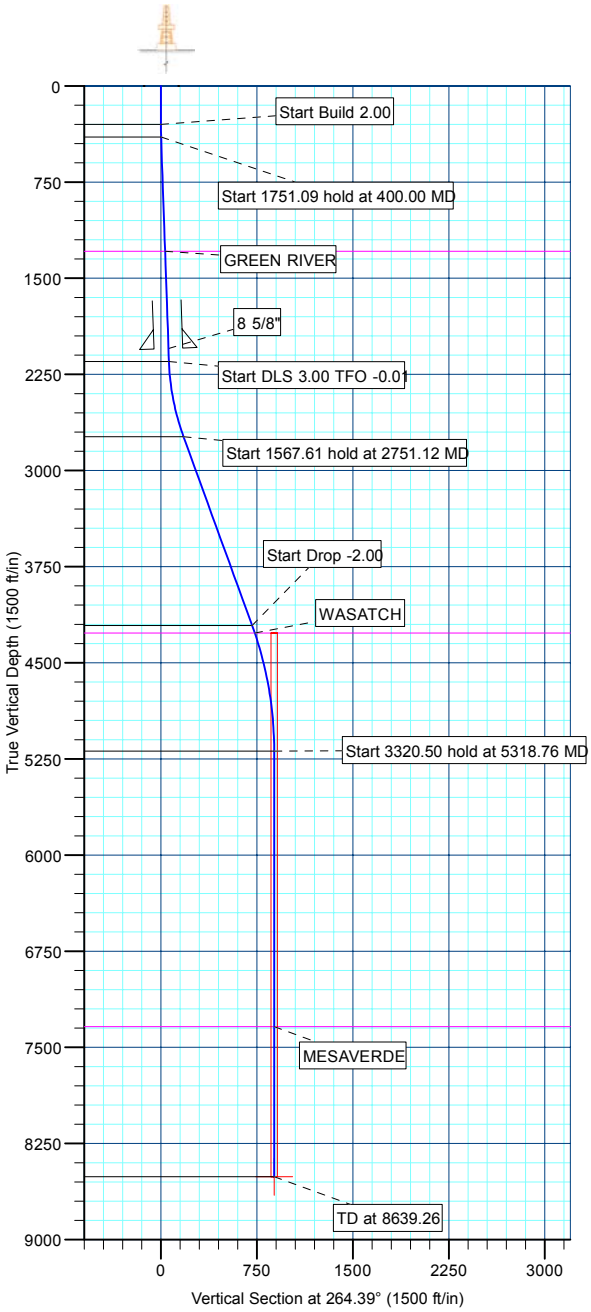
WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)

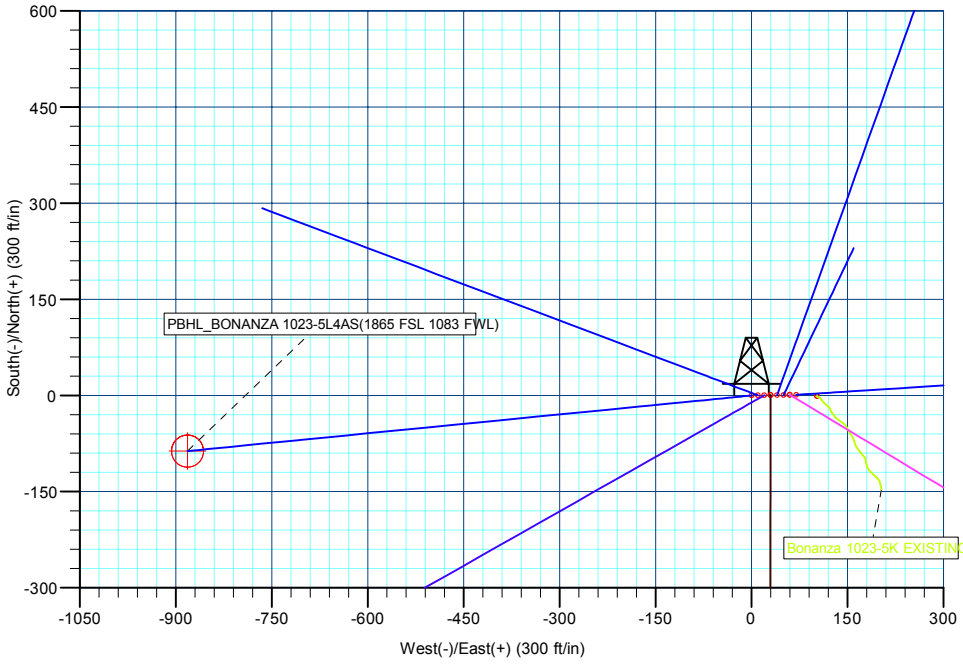
Name	TVD	+N/-S	+E/-W	Latitude	Longitude	Shape
PBHL	8510.00	-86.67	-881.59	39° 58' 33.067 N	109° 21' 20.084 W	Circle (Radius: 25.00)

WELL DETAILS: BONANZA 1023-5L4AS

Ground Level: 5327.00

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.00	0.00	14521602.38	2102003.61	39° 58' 33.924 N	109° 21' 8.759 W	





Plan: PLAN #1 4-28-10 RHS (BONANZA 1023-5L4AS/BONANZA 1023-5L4AS)

Created By: Robert H. Scott Date: 15:21, April 28 2010

Anadarko Petroleum Corporation

Weatherford International Ltd.

Planning Report

Weatherford

Database:	EDM 2003.21 Single User Db	**Local Co-ordinate Reference:**	Well BONANZA 1023-5L4AS
Company:	ANADARKO PETROLEUM CORP.	**TVD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	**MD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Site:	BONANZA 1023-5K PAD	**North Reference:**	True
Well:	BONANZA 1023-5L4AS	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BONANZA 1023-5L4AS		
Design:	PLAN #1 4-28-10 RHS		

Project UINTAH COUNTY, UTAH (nad 27),

Map System:	Universal Transverse Mercator (US Survey Fee	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Zone 12N (114 W to 108 W)		

Site BONANZA 1023-5K PAD, SECTION 5 T10S R23E

Site Position:		**Northing:**	14,521,604.77 ft	**Latitude:**	39° 58' 33.935 N
From:	Lat/Long	**Easting:**	2,102,073.64 ft	**Longitude:**	109° 21' 7.859 W
Position Uncertainty:	0.00 ft	**Slot Radius:**	in	**Grid Convergence:**	1.06 °

Well BONANZA 1023-5L4AS

Well Position	**+N/-S**	-1.09 ft	**Northing:**	14,521,602.38 ft	**Latitude:**	39° 58' 33.924 N
	+E/-W	-70.06 ft	**Easting:**	2,102,003.61 ft	**Longitude:**	109° 21' 8.759 W
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	5,327.00 ft

Wellbore BONANZA 1023-5L4AS

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	BGGM2009	4/28/2010	11.17	65.93	52,462

Design PLAN #1 4-28-10 RHS

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.00

Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	264.39

Plan Sections

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	
400.00	2.00	264.39	399.98	-0.17	-1.74	2.00	2.00	0.00	264.39	
2,151.09	2.00	264.39	2,150.00	-6.14	-62.56	0.00	0.00	0.00	0.00	
2,751.12	20.00	264.38	2,736.58	-17.30	-176.03	3.00	3.00	0.00	-0.01	
4,318.72	20.00	264.38	4,209.64	-69.76	-709.64	0.00	0.00	0.00	0.00	
5,318.76	0.00	0.00	5,189.50	-86.67	-881.59	2.00	-2.00	0.00	180.00	
8,639.26	0.00	0.00	8,510.00	-86.67	-881.59	0.00	0.00	0.00	0.00	PBHL_BONANZA 1

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Weatherford International Ltd.

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Weatherford

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Company:	ANADARKO PETROLEUM CORP.	**TVD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	**MD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Site:	BONANZA 1023-5K PAD	**North Reference:**	True
Well:	BONANZA 1023-5L4AS	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BONANZA 1023-5L4AS		
Design:	PLAN #1 4-28-10 RHS		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
Start Build 2.00									
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
Start 1751.09 hold at 400.00 MD									
400.00	2.00	264.39	399.98	-0.17	-1.74	1.75	2.00	2.00	0.00
500.00	2.00	264.39	499.92	-0.51	-5.21	5.24	0.00	0.00	0.00
600.00	2.00	264.39	599.86	-0.85	-8.68	8.73	0.00	0.00	0.00
700.00	2.00	264.39	699.80	-1.19	-12.16	12.22	0.00	0.00	0.00
800.00	2.00	264.39	799.74	-1.54	-15.63	15.70	0.00	0.00	0.00
900.00	2.00	264.39	899.68	-1.88	-19.10	19.19	0.00	0.00	0.00
1,000.00	2.00	264.39	999.61	-2.22	-22.58	22.68	0.00	0.00	0.00
1,100.00	2.00	264.39	1,099.55	-2.56	-26.05	26.17	0.00	0.00	0.00
1,200.00	2.00	264.39	1,199.49	-2.90	-29.52	29.66	0.00	0.00	0.00
GREEN RIVER									
1,291.56	2.00	264.39	1,291.00	-3.21	-32.70	32.86	0.00	0.00	0.00
1,300.00	2.00	264.39	1,299.43	-3.24	-33.00	33.15	0.00	0.00	0.00
1,400.00	2.00	264.39	1,399.37	-3.58	-36.47	36.64	0.00	0.00	0.00
1,500.00	2.00	264.39	1,499.31	-3.92	-39.94	40.13	0.00	0.00	0.00
1,600.00	2.00	264.39	1,599.25	-4.26	-43.42	43.62	0.00	0.00	0.00
1,700.00	2.00	264.39	1,699.19	-4.61	-46.89	47.11	0.00	0.00	0.00
1,800.00	2.00	264.39	1,799.13	-4.95	-50.36	50.60	0.00	0.00	0.00
1,900.00	2.00	264.39	1,899.07	-5.29	-53.84	54.09	0.00	0.00	0.00
2,000.00	2.00	264.39	1,999.01	-5.63	-57.31	57.58	0.00	0.00	0.00
8 5/8"									
2,051.03	2.00	264.39	2,050.00	-5.80	-59.08	59.37	0.00	0.00	0.00
2,100.00	2.00	264.39	2,098.94	-5.97	-60.78	61.07	0.00	0.00	0.00
Start DLS 3.00 TFO -0.01									
2,151.09	2.00	264.39	2,150.00	-6.14	-62.56	62.86	0.00	0.00	0.00
2,200.00	3.47	264.39	2,198.86	-6.37	-64.88	65.19	3.00	3.00	0.00
2,300.00	6.47	264.39	2,298.47	-7.22	-73.49	73.85	3.00	3.00	0.00
2,400.00	9.47	264.39	2,397.49	-8.58	-87.29	87.71	3.00	3.00	0.00
2,500.00	12.47	264.39	2,495.65	-10.44	-106.22	106.73	3.00	3.00	0.00
2,600.00	15.47	264.39	2,592.69	-12.80	-130.24	130.86	3.00	3.00	0.00
2,700.00	18.47	264.38	2,688.32	-15.65	-159.28	160.04	3.00	3.00	0.00
Start 1567.61 hold at 2751.12 MD									
2,751.12	20.00	264.38	2,736.58	-17.30	-176.03	176.88	3.00	3.00	0.00
2,800.00	20.00	264.38	2,782.52	-18.94	-192.67	193.60	0.00	0.00	0.00
2,900.00	20.00	264.38	2,876.49	-22.28	-226.71	227.81	0.00	0.00	0.00
3,000.00	20.00	264.38	2,970.46	-25.63	-260.75	262.01	0.00	0.00	0.00
3,100.00	20.00	264.38	3,064.43	-28.98	-294.79	296.21	0.00	0.00	0.00
3,200.00	20.00	264.38	3,158.40	-32.32	-328.83	330.42	0.00	0.00	0.00
3,300.00	20.00	264.38	3,252.36	-35.67	-362.87	364.62	0.00	0.00	0.00
3,400.00	20.00	264.38	3,346.33	-39.02	-396.91	398.82	0.00	0.00	0.00
3,500.00	20.00	264.38	3,440.30	-42.36	-430.95	433.03	0.00	0.00	0.00
3,600.00	20.00	264.38	3,534.27	-45.71	-464.99	467.23	0.00	0.00	0.00
3,700.00	20.00	264.38	3,628.24	-49.06	-499.03	501.43	0.00	0.00	0.00
3,800.00	20.00	264.38	3,722.21	-52.40	-533.07	535.64	0.00	0.00	0.00
3,900.00	20.00	264.38	3,816.18	-55.75	-567.11	569.84	0.00	0.00	0.00
4,000.00	20.00	264.38	3,910.15	-59.10	-601.15	604.04	0.00	0.00	0.00
4,100.00	20.00	264.38	4,004.11	-62.44	-635.19	638.25	0.00	0.00	0.00
4,200.00	20.00	264.38	4,098.08	-65.79	-669.22	672.45	0.00	0.00	0.00
4,300.00	20.00	264.38	4,192.05	-69.14	-703.26	706.65	0.00	0.00	0.00
Start Drop -2.00									
4,318.72	20.00	264.38	4,209.64	-69.76	-709.64	713.06	0.00	0.00	0.00

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Company:	ANADARKO PETROLEUM CORP.	**TVD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	**MD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Site:	BONANZA 1023-5K PAD	**North Reference:**	True
Well:	BONANZA 1023-5L4AS	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BONANZA 1023-5L4AS		
Design:	PLAN #1 4-28-10 RHS		

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
WASATCH									
4,380.59	18.76	264.38	4,268.00	-71.77	-730.07	733.59	2.00	-2.00	0.00
4,400.00	18.38	264.38	4,286.40	-72.38	-736.22	739.77	2.00	-2.00	0.00
4,500.00	16.38	264.38	4,381.84	-75.30	-765.94	769.63	2.00	-2.00	0.00
4,600.00	14.38	264.38	4,478.25	-77.89	-792.32	796.14	2.00	-2.00	0.00
4,700.00	12.38	264.38	4,575.53	-80.16	-815.35	819.28	2.00	-2.00	0.00
4,800.00	10.38	264.38	4,673.57	-82.09	-834.97	839.00	2.00	-2.00	0.00
4,900.00	8.38	264.38	4,772.22	-83.68	-851.18	855.29	2.00	-2.00	0.00
5,000.00	6.38	264.38	4,871.39	-84.93	-863.96	868.12	2.00	-2.00	0.00
5,100.00	4.38	264.38	4,970.95	-85.85	-873.28	877.49	2.00	-2.00	0.00
5,200.00	2.38	264.38	5,070.77	-86.43	-879.14	883.38	2.00	-2.00	0.00
5,300.00	0.38	264.38	5,170.74	-86.66	-881.53	885.78	2.00	-2.00	0.00
Start 3320.50 hold at 5318.76 MD									
5,318.76	0.00	0.00	5,189.50	-86.67	-881.59	885.84	2.00	-2.00	0.00
5,400.00	0.00	0.00	5,270.74	-86.67	-881.59	885.84	0.00	0.00	0.00
5,500.00	0.00	0.00	5,370.74	-86.67	-881.59	885.84	0.00	0.00	0.00
5,600.00	0.00	0.00	5,470.74	-86.67	-881.59	885.84	0.00	0.00	0.00
5,700.00	0.00	0.00	5,570.74	-86.67	-881.59	885.84	0.00	0.00	0.00
5,800.00	0.00	0.00	5,670.74	-86.67	-881.59	885.84	0.00	0.00	0.00
5,900.00	0.00	0.00	5,770.74	-86.67	-881.59	885.84	0.00	0.00	0.00
6,000.00	0.00	0.00	5,870.74	-86.67	-881.59	885.84	0.00	0.00	0.00
6,100.00	0.00	0.00	5,970.74	-86.67	-881.59	885.84	0.00	0.00	0.00
6,200.00	0.00	0.00	6,070.74	-86.67	-881.59	885.84	0.00	0.00	0.00
6,300.00	0.00	0.00	6,170.74	-86.67	-881.59	885.84	0.00	0.00	0.00
6,400.00	0.00	0.00	6,270.74	-86.67	-881.59	885.84	0.00	0.00	0.00
6,500.00	0.00	0.00	6,370.74	-86.67	-881.59	885.84	0.00	0.00	0.00
6,600.00	0.00	0.00	6,470.74	-86.67	-881.59	885.84	0.00	0.00	0.00
6,700.00	0.00	0.00	6,570.74	-86.67	-881.59	885.84	0.00	0.00	0.00
6,800.00	0.00	0.00	6,670.74	-86.67	-881.59	885.84	0.00	0.00	0.00
6,900.00	0.00	0.00	6,770.74	-86.67	-881.59	885.84	0.00	0.00	0.00
7,000.00	0.00	0.00	6,870.74	-86.67	-881.59	885.84	0.00	0.00	0.00
7,100.00	0.00	0.00	6,970.74	-86.67	-881.59	885.84	0.00	0.00	0.00
7,200.00	0.00	0.00	7,070.74	-86.67	-881.59	885.84	0.00	0.00	0.00
7,300.00	0.00	0.00	7,170.74	-86.67	-881.59	885.84	0.00	0.00	0.00
7,400.00	0.00	0.00	7,270.74	-86.67	-881.59	885.84	0.00	0.00	0.00
MESAVERDE									
7,468.26	0.00	0.00	7,339.00	-86.67	-881.59	885.84	0.00	0.00	0.00
7,500.00	0.00	0.00	7,370.74	-86.67	-881.59	885.84	0.00	0.00	0.00
7,600.00	0.00	0.00	7,470.74	-86.67	-881.59	885.84	0.00	0.00	0.00
7,700.00	0.00	0.00	7,570.74	-86.67	-881.59	885.84	0.00	0.00	0.00
7,800.00	0.00	0.00	7,670.74	-86.67	-881.59	885.84	0.00	0.00	0.00
7,900.00	0.00	0.00	7,770.74	-86.67	-881.59	885.84	0.00	0.00	0.00
8,000.00	0.00	0.00	7,870.74	-86.67	-881.59	885.84	0.00	0.00	0.00
8,100.00	0.00	0.00	7,970.74	-86.67	-881.59	885.84	0.00	0.00	0.00
8,200.00	0.00	0.00	8,070.74	-86.67	-881.59	885.84	0.00	0.00	0.00
8,300.00	0.00	0.00	8,170.74	-86.67	-881.59	885.84	0.00	0.00	0.00
8,400.00	0.00	0.00	8,270.74	-86.67	-881.59	885.84	0.00	0.00	0.00
8,500.00	0.00	0.00	8,370.74	-86.67	-881.59	885.84	0.00	0.00	0.00
8,600.00	0.00	0.00	8,470.74	-86.67	-881.59	885.84	0.00	0.00	0.00
TD at 8639.26 - PBHL_BONANZA 1023-5L4AS(1865 FSL 1083 FWL)									
8,639.26	0.00	0.00	8,510.00	-86.67	-881.59	885.84	0.00	0.00	0.00

Anadarko Petroleum Corporation

Weatherford International Ltd.

Planning Report

Weatherford

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Company:	ANADARKO PETROLEUM CORP.	**TVD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Project:	UINTAH COUNTY, UTAH (nad 27)	**MD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Site:	BONANZA 1023-5K PAD	**North Reference:**	True
Well:	BONANZA 1023-5L4AS	**Survey Calculation Method:**	Minimum Curvature
Wellbore:	BONANZA 1023-5L4AS		
Design:	PLAN #1 4-28-10 RHS		

Design Targets

Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
PBHL_BONANZA 10 - plan hits target center - Circle (radius 25.00)	0.00	0.00	8,510.00	-86.67	-881.59	14,521,499.44	2,101,123.78	39° 58' 33.067 N	109° 21' 20.084 W

Casing Points

Measured Depth (ft)	Vertical Depth (ft)	Name	Casing Diameter (in)	Hole Diameter (in)
2,051.03	2,050.00	8 5/8"	8.62	11.00

Formations

Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
1,291.56	1,291.00	GREEN RIVER			
4,380.59	4,268.00	WASATCH			
7,468.26	7,339.00	MESAVERDE			

Plan Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
300.00	300.00	0.00	0.00	Start Build 2.00
400.00	399.98	-0.17	-1.74	Start 1751.09 hold at 400.00 MD
2,151.09	2,150.00	-6.14	-62.56	Start DLS 3.00 TFO -0.01
2,751.12	2,736.58	-17.30	-176.03	Start 1567.61 hold at 2751.12 MD
4,318.72	4,209.64	-69.76	-709.64	Start Drop -2.00
5,318.76	5,189.50	-86.67	-881.59	Start 3320.50 hold at 5318.76 MD
8,639.26	8,510.00	-86.67	-881.59	TD at 8639.26

ANADARKO PETROLEUM CORP.

UINTAH COUNTY, UTAH (nad 27)
BONANZA 1023-5K PAD
BONANZA 1023-5L4AS

BONANZA 1023-5L4AS
PLAN #1 4-28-10 RHS

Anticollision Report

28 April, 2010

RECEIVED: October 17, 2011

Weatherford International Ltd.

Anticollision Report

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well BONANZA 1023-5L4AS
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Reference Site:	BONANZA 1023-5K PAD	**MD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	BONANZA 1023-5L4AS	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	BONANZA 1023-5L4AS	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 4-28-10 RHS	**Offset TVD Reference:**	Offset Datum

Reference PLAN #1 4-28-10 RHS

Filter type:	NO GLOBAL FILTER: Using user defined selection & filtering criteria		
Interpolation Method:	Stations	**Error Model:**	ISCWSA
Depth Range:	0.00 to 20,000.00ft	**Scan Method:**	Closest Approach 3D
Results Limited by:	Maximum center-center distance of 10,000.00ft	**Error Surface:**	Elliptical Conic
Warning Levels Evaluated at:	2.00 **Sigma**		

Survey Tool Program **Date** 4/28/2010

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
0.00	8,639.26	PLAN #1 4-28-10 RHS (BONANZA 1023-5	MWD	MWD - Standard

Summary

Site Name / Offset Well - Wellbore - Design	Reference Measured Depth (ft)	Offset Measured Depth (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Separation Factor	Warning
BONANZA 1023-5K PAD						
BONANZA 1023-5J2DS - BONANZA 1023-5J2DS - PLA	300.00	300.00	70.06	68.97	64.140	CC, ES
BONANZA 1023-5J2DS - BONANZA 1023-5J2DS - PLAI	2,151.09	2,140.63	188.91	179.72	20.544	SF
Bonanza 1023-5K EXISTING - Bonanza 1023-5K EXIST	100.00	85.85	102.63	102.42	487.227	CC
Bonanza 1023-5K EXISTING - Bonanza 1023-5K EXIST	300.95	286.98	103.04	101.89	89.519	ES
Bonanza 1023-5K EXISTING - Bonanza 1023-5K EXIST	2,200.00	2,182.32	184.23	174.71	19.343	SF
BONANZA 1023-5K1BS - BONANZA 1023-5K1BS - PLA	300.00	300.00	40.08	38.99	36.690	CC, ES
BONANZA 1023-5K1BS - BONANZA 1023-5K1BS - PLA	600.00	594.71	61.21	58.76	24.966	SF
BONANZA 1023-5K1CS - BONANZA 1023-5K1CS - PLA	300.00	300.00	50.17	49.07	45.924	CC, ES
BONANZA 1023-5K1CS - BONANZA 1023-5K1CS - PLA	8,639.26	8,510.49	1,088.46	1,050.37	28.580	SF
BONANZA 1023-5K3DS - BONANZA 1023-5K3DS - PLA	300.00	300.00	29.99	28.90	27.457	CC, ES
BONANZA 1023-5K3DS - BONANZA 1023-5K3DS - PLA	600.00	597.68	44.37	41.97	18.506	SF
BONANZA 1023-5L1DS - BONANZA 1023-5L1DS - PLA	589.60	590.01	9.41	7.07	4.018	CC
BONANZA 1023-5L1DS - BONANZA 1023-5L1DS - PLA	700.00	700.38	9.85	6.99	3.453	ES
BONANZA 1023-5L1DS - BONANZA 1023-5L1DS - PLA	900.00	900.31	12.42	8.62	3.271	SF
BONANZA 1023-5L4DS - BONANZA 1023-5L4DS - PLA	754.03	754.83	18.49	15.43	6.055	CC
BONANZA 1023-5L4DS - BONANZA 1023-5L4DS - PLA	900.00	900.76	18.84	15.10	5.039	ES
BONANZA 1023-5L4DS - BONANZA 1023-5L4DS - PLA	1,600.00	1,600.54	28.00	20.92	3.956	SF
BONANZA 1023-5O2AS - BONANZA 1023-5O2AS - PLA	300.00	300.00	59.98	58.89	54.907	CC, ES
BONANZA 1023-5O2AS - BONANZA 1023-5O2AS - PLA	2,151.09	2,140.40	206.11	196.79	22.111	SF

Offset Design BONANZA 1023-5K PAD - BONANZA 1023-5J2DS - BONANZA 1023-5J2DS - PLAN #1 4-28-10 RHS

Offset Site Error: 0.00 ft

Survey Program: 0-MWD

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	89.11	1.09	70.06	70.06				
100.00	100.00	100.00	100.00	0.10	0.10	89.11	1.09	70.06	70.06	69.87	0.19	362.468	
200.00	200.00	200.00	200.00	0.32	0.32	89.11	1.09	70.06	70.06	69.42	0.64	108.994	
300.00	300.00	300.00	300.00	0.55	0.55	89.11	1.09	70.06	70.06	68.97	1.09	64.140	CC, ES
400.00	399.98	399.98	399.98	0.76	0.77	-175.40	1.09	70.06	71.80	70.27	1.53	46.829	
500.00	499.92	499.92	499.92	0.97	1.00	-175.61	1.09	70.06	75.28	73.32	1.96	38.350	
600.00	599.86	599.86	599.86	1.19	1.22	-175.80	1.09	70.06	78.76	76.36	2.40	32.811	
700.00	699.80	699.80	699.80	1.42	1.44	-175.98	1.09	70.06	82.24	79.40	2.84	28.937	
800.00	799.74	799.74	799.74	1.64	1.67	-176.14	1.09	70.06	85.73	82.44	3.29	26.085	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anadarko Petroleum Corporation

Weatherford International Ltd.

Anticollision Report

Weatherford

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well BONANZA 1023-5L4AS
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Reference Site:	BONANZA 1023-5K PAD	**MD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	BONANZA 1023-5L4AS	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	BONANZA 1023-5L4AS	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 4-28-10 RHS	**Offset TVD Reference:**	Offset Datum

Offset Design BONANZA 1023-5K PAD - BONANZA 1023-5J2DS - BONANZA 1023-5J2DS - PLAN #1 4-28-10 RHS

Offset Site Error: 0.00 ft

Survey Program: 0-MWD

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
900.00	899.68	899.68	899.68	1.87	1.89	-176.30	1.09	70.06	89.21	85.48	3.73	23.902	
1,000.00	999.61	999.61	999.61	2.10	2.12	-176.43	1.09	70.06	92.69	88.51	4.18	22.180	
1,100.00	1,099.55	1,096.28	1,096.27	2.34	2.32	-176.58	1.19	71.67	97.85	93.24	4.61	21.233	
1,200.00	1,199.49	1,194.07	1,193.94	2.57	2.53	-176.76	1.49	76.28	106.04	101.00	5.03	21.061	
1,300.00	1,299.43	1,293.69	1,293.43	2.80	2.74	-176.91	1.82	81.48	114.74	109.28	5.46	21.006	
1,400.00	1,399.37	1,393.31	1,392.91	3.03	2.96	-177.05	2.14	86.68	123.45	117.56	5.89	20.947	
1,500.00	1,499.31	1,492.93	1,492.39	3.27	3.18	-177.16	2.47	91.89	132.16	125.84	6.33	20.887	
1,600.00	1,599.25	1,592.55	1,591.88	3.50	3.40	-177.26	2.80	97.09	140.88	134.11	6.76	20.827	
1,700.00	1,699.19	1,692.17	1,691.36	3.73	3.63	-177.35	3.13	102.29	149.59	142.38	7.20	20.768	
1,800.00	1,799.13	1,791.79	1,790.84	3.97	3.85	-177.43	3.46	107.50	158.30	150.66	7.64	20.712	
1,900.00	1,899.07	1,891.41	1,890.33	4.20	4.08	-177.50	3.79	112.70	167.01	158.93	8.08	20.659	
2,000.00	1,999.01	1,991.03	1,989.81	4.43	4.32	-177.57	4.12	117.90	175.72	167.20	8.53	20.609	
2,100.00	2,098.94	2,090.65	2,089.29	4.67	4.55	-177.63	4.45	123.11	184.44	175.47	8.97	20.561	
2,151.09	2,150.00	2,140.63	2,139.20	4.79	4.67	-177.65	4.62	125.74	188.91	179.72	9.20	20.544 SF	
2,200.00	2,198.86	2,184.78	2,183.25	4.91	4.77	-177.68	4.81	128.77	194.59	185.19	9.40	20.705	
2,300.00	2,298.47	2,273.50	2,271.48	5.17	5.01	-177.75	5.39	137.91	213.50	203.70	9.80	21.783	
2,400.00	2,397.49	2,359.16	2,356.18	5.46	5.25	-177.85	6.19	150.62	241.92	231.74	10.18	23.761	
2,500.00	2,495.65	2,440.72	2,436.23	5.79	5.52	-177.94	7.18	166.23	279.41	268.88	10.53	26.528	
2,600.00	2,592.69	2,517.37	2,510.78	6.17	5.79	-178.02	8.30	183.99	325.41	314.56	10.85	29.990	
2,700.00	2,688.32	2,588.49	2,579.25	6.62	6.08	-178.07	9.51	203.13	379.30	368.17	11.13	34.072	
2,751.12	2,736.58	2,622.56	2,611.80	6.88	6.23	-178.10	10.15	213.20	409.67	398.41	11.26	36.374	
2,800.00	2,782.52	2,653.99	2,641.65	7.14	6.38	-178.15	10.77	223.00	439.90	428.44	11.46	38.385	
2,900.00	2,876.49	2,720.43	2,704.26	7.70	6.71	-178.23	12.17	245.20	503.54	491.66	11.88	42.382	
3,000.00	2,970.46	2,797.04	2,776.24	8.28	7.11	-178.31	13.83	271.35	567.81	555.51	12.30	46.149	
3,100.00	3,064.43	2,873.64	2,848.23	8.89	7.54	-178.38	15.48	297.50	632.09	619.35	12.74	49.626	
3,200.00	3,158.40	2,950.25	2,920.22	9.51	7.99	-178.43	17.14	323.66	696.36	683.18	13.18	52.849	
3,300.00	3,252.36	3,026.86	2,992.20	10.15	8.44	-178.47	18.79	349.81	760.63	747.01	13.62	55.838	
3,400.00	3,346.33	3,103.47	3,064.19	10.80	8.91	-178.51	20.44	375.96	824.91	810.83	14.07	58.614	
3,500.00	3,440.30	3,180.08	3,136.18	11.46	9.39	-178.54	22.10	402.11	889.18	874.65	14.53	61.190	
3,600.00	3,534.27	3,256.68	3,208.16	12.12	9.87	-178.57	23.75	428.27	953.45	938.46	14.99	63.589	
3,700.00	3,628.24	3,333.29	3,280.15	12.80	10.36	-178.59	25.41	454.42	1,017.73	1,002.27	15.46	65.827	
3,800.00	3,722.21	3,409.90	3,352.14	13.47	10.86	-178.61	27.06	480.57	1,082.00	1,066.07	15.93	67.916	
3,900.00	3,816.18	3,486.51	3,424.12	14.16	11.36	-178.63	28.72	506.72	1,146.27	1,129.87	16.41	69.868	
4,000.00	3,910.15	3,563.12	3,496.11	14.85	11.87	-178.65	30.37	532.87	1,210.55	1,193.66	16.88	71.695	
4,100.00	4,004.11	3,639.72	3,568.10	15.54	12.38	-178.66	32.02	559.03	1,274.82	1,257.46	17.37	73.409	
4,200.00	4,098.08	3,716.33	3,640.09	16.23	12.89	-178.67	33.68	585.18	1,339.10	1,321.25	17.85	75.018	
4,300.00	4,192.05	3,792.94	3,712.07	16.93	13.41	-178.69	35.33	611.33	1,403.37	1,385.03	18.34	76.531	
4,318.72	4,209.64	3,807.28	3,725.55	17.06	13.51	-178.69	35.64	616.23	1,415.40	1,396.98	18.43	76.804	
4,400.00	4,286.40	3,870.28	3,784.75	17.55	13.94	-178.73	37.00	637.73	1,466.76	1,447.81	18.95	77.415	
4,500.00	4,381.84	3,949.75	3,859.42	18.04	14.48	-178.76	38.72	664.86	1,527.45	1,507.90	19.55	78.131	
4,600.00	4,478.25	4,031.28	3,936.04	18.48	15.04	-178.80	40.48	692.70	1,585.34	1,565.20	20.14	78.717	
4,700.00	4,575.53	4,114.79	4,014.51	18.88	15.61	-178.82	42.28	721.20	1,640.34	1,619.63	20.71	79.189	
4,800.00	4,673.57	4,200.17	4,094.73	19.23	16.20	-178.84	44.13	750.35	1,692.40	1,671.13	21.27	79.559	
4,900.00	4,772.22	4,287.31	4,176.62	19.53	16.80	-178.86	46.01	780.09	1,741.45	1,719.64	21.81	79.840	
5,000.00	4,871.39	4,376.10	4,260.06	19.79	17.42	-178.87	47.93	810.41	1,787.42	1,765.09	22.33	80.041	
5,100.00	4,970.95	4,466.45	4,344.96	20.01	18.05	-178.88	49.88	841.25	1,830.27	1,807.45	22.83	80.171	
5,200.00	5,070.77	4,558.24	4,431.21	20.18	18.69	-178.88	51.86	872.58	1,869.95	1,846.64	23.31	80.235	
5,300.00	5,170.74	4,651.35	4,518.71	20.31	19.34	-178.88	53.87	904.37	1,906.39	1,882.63	23.76	80.241	
5,318.76	5,189.50	4,668.97	4,535.26	20.33	19.46	85.50	54.25	910.38	1,912.87	1,889.03	23.84	80.231	
5,400.00	5,270.74	4,745.30	4,606.99	20.42	20.00	85.52	55.90	936.44	1,940.65	1,916.44	24.21	80.154	
5,500.00	5,370.74	4,839.27	4,695.29	20.54	20.66	85.53	57.93	968.52	1,974.86	1,950.19	24.67	80.057	
5,600.00	5,470.74	4,933.24	4,783.59	20.65	21.32	85.55	59.96	1,000.60	2,009.06	1,983.93	25.13	79.957	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anadarko Petroleum Corporation

Weatherford International Ltd.

Anticollision Report

Weatherford

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well BONANZA 1023-5L4AS
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Reference Site:	BONANZA 1023-5K PAD	**MD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	BONANZA 1023-5L4AS	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	BONANZA 1023-5L4AS	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 4-28-10 RHS	**Offset TVD Reference:**	Offset Datum

Offset Design BONANZA 1023-5K PAD - BONANZA 1023-5J2DS - BONANZA 1023-5J2DS - PLAN #1 4-28-10 RHS

Offset Site Error: 0.00 ft

Survey Program: 0-MWD

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
5,700.00	5,570.74	5,027.20	4,871.88	20.77	21.98	85.56	61.99	1,032.68	2,043.26	2,017.67	25.59	79.853	
5,800.00	5,670.74	5,149.55	4,986.94	20.90	22.81	85.58	64.61	1,074.19	2,077.39	2,051.26	26.13	79.512	
5,900.00	5,770.74	5,506.15	5,330.09	21.02	24.48	85.61	70.68	1,170.16	2,104.42	2,077.23	27.19	77.403	
6,000.00	5,870.74	5,882.71	5,702.42	21.14	25.53	85.63	74.12	1,224.51	2,118.93	2,090.78	28.15	75.272	
6,100.00	5,970.74	6,151.27	5,970.74	21.27	25.90	85.64	74.69	1,233.55	2,121.28	2,092.49	28.79	73.672	
6,200.00	6,070.74	6,251.27	6,070.74	21.40	26.00	85.64	74.69	1,233.55	2,121.28	2,092.13	29.15	72.765	
6,300.00	6,170.74	6,351.27	6,170.74	21.53	26.11	85.64	74.69	1,233.55	2,121.28	2,091.77	29.52	71.868	
6,400.00	6,270.74	6,451.27	6,270.74	21.66	26.22	85.64	74.69	1,233.55	2,121.28	2,091.40	29.88	70.987	
6,500.00	6,370.74	6,551.27	6,370.74	21.79	26.34	85.64	74.69	1,233.55	2,121.28	2,091.03	30.25	70.122	
6,600.00	6,470.74	6,651.27	6,470.74	21.93	26.45	85.64	74.69	1,233.55	2,121.28	2,090.66	30.62	69.274	
6,700.00	6,570.74	6,751.27	6,570.74	22.06	26.57	85.64	74.69	1,233.55	2,121.28	2,090.29	30.99	68.441	
6,800.00	6,670.74	6,851.27	6,670.74	22.20	26.68	85.64	74.69	1,233.55	2,121.28	2,089.91	31.37	67.623	
6,900.00	6,770.74	6,951.27	6,770.74	22.34	26.80	85.64	74.69	1,233.55	2,121.28	2,089.54	31.75	66.821	
7,000.00	6,870.74	7,051.27	6,870.74	22.48	26.92	85.64	74.69	1,233.55	2,121.28	2,089.16	32.12	66.034	
7,100.00	6,970.74	7,151.27	6,970.74	22.62	27.04	85.64	74.69	1,233.55	2,121.28	2,088.78	32.50	65.261	
7,200.00	7,070.74	7,251.27	7,070.74	22.77	27.16	85.64	74.69	1,233.55	2,121.28	2,088.40	32.89	64.503	
7,300.00	7,170.74	7,351.27	7,170.74	22.91	27.29	85.64	74.69	1,233.55	2,121.28	2,088.01	33.27	63.759	
7,400.00	7,270.74	7,451.27	7,270.74	23.05	27.41	85.64	74.69	1,233.55	2,121.28	2,087.63	33.66	63.029	
7,500.00	7,370.74	7,551.27	7,370.74	23.20	27.54	85.64	74.69	1,233.55	2,121.28	2,087.24	34.04	62.313	
7,600.00	7,470.74	7,651.27	7,470.74	23.35	27.67	85.64	74.69	1,233.55	2,121.28	2,086.85	34.43	61.610	
7,700.00	7,570.74	7,751.27	7,570.74	23.50	27.79	85.64	74.69	1,233.55	2,121.28	2,086.46	34.82	60.920	
7,800.00	7,670.74	7,851.27	7,670.74	23.65	27.92	85.64	74.69	1,233.55	2,121.28	2,086.07	35.21	60.243	
7,900.00	7,770.74	7,951.27	7,770.74	23.80	28.05	85.64	74.69	1,233.55	2,121.28	2,085.68	35.60	59.579	
8,000.00	7,870.74	8,051.27	7,870.74	23.95	28.19	85.64	74.69	1,233.55	2,121.28	2,085.28	36.00	58.927	
8,100.00	7,970.74	8,151.27	7,970.74	24.11	28.32	85.64	74.69	1,233.55	2,121.28	2,084.89	36.39	58.287	
8,200.00	8,070.74	8,251.27	8,070.74	24.26	28.45	85.64	74.69	1,233.55	2,121.28	2,084.49	36.79	57.659	
8,300.00	8,170.74	8,351.27	8,170.74	24.42	28.59	85.64	74.69	1,233.55	2,121.28	2,084.10	37.19	57.042	
8,400.00	8,270.74	8,451.27	8,270.74	24.58	28.73	85.64	74.69	1,233.55	2,121.28	2,083.70	37.59	56.437	
8,500.00	8,370.74	8,551.27	8,370.74	24.73	28.87	85.64	74.69	1,233.55	2,121.28	2,083.30	37.99	55.843	
8,558.47	8,429.21	8,609.74	8,429.21	24.83	28.95	85.64	74.69	1,233.55	2,121.28	2,083.06	38.22	55.500	
8,600.00	8,470.74	8,631.53	8,451.00	24.89	28.98	85.64	74.69	1,233.55	2,121.37	2,083.03	38.35	55.318	
8,639.26	8,510.00	8,631.53	8,451.00	24.96	28.98	85.64	74.69	1,233.55	2,122.10	2,083.67	38.43	55.221	

Anadarko Petroleum Corporation

Weatherford International Ltd.

Anticollision Report

Weatherford

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well BONANZA 1023-5L4AS
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Reference Site:	BONANZA 1023-5K PAD	**MD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	BONANZA 1023-5L4AS	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	BONANZA 1023-5L4AS	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 4-28-10 RHS	**Offset TVD Reference:**	Offset Datum

Offset Design BONANZA 1023-5K PAD - Bonanza 1023-5K EXISTING - Bonanza 1023-5K EXISTING - Bonanza 102 — **Offset Site Error:** 0.00 ft

Survey Program: 100-NS-GYRO-MS — **Offset Well Error:** 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	90.41	-0.73	102.56	103.52				
100.00	100.00	85.85	85.85	0.10	0.11	90.49	-0.88	102.63	102.63	102.42	0.21	487.227	CC
200.00	200.00	185.68	185.68	0.32	0.36	90.68	-1.23	102.85	102.86	102.19	0.68	151.978	
300.00	300.00	286.03	286.03	0.55	0.60	90.87	-1.56	103.03	103.04	101.90	1.15	89.856	
300.95	300.95	286.98	286.98	0.55	0.60	-173.52	-1.57	103.03	103.04	101.89	1.15	89.519	ES
400.00	399.98	385.64	385.64	0.76	0.84	-173.44	-1.90	103.12	104.87	103.27	1.59	65.763	
500.00	499.92	485.58	485.57	0.97	1.08	-173.53	-2.14	103.47	108.69	106.64	2.05	53.044	
600.00	599.86	585.81	585.81	1.19	1.24	-173.63	-2.34	103.66	112.36	109.94	2.42	46.448	
700.00	699.80	685.49	685.48	1.42	1.39	-173.76	-2.45	103.78	115.94	113.16	2.79	41.617	
800.00	799.74	785.24	785.23	1.64	1.62	-173.85	-2.65	104.13	119.77	116.53	3.24	37.006	
900.00	899.68	885.28	885.28	1.87	1.87	-173.97	-2.78	104.52	123.63	119.92	3.70	33.368	
1,000.00	999.61	985.29	985.28	2.10	2.07	-174.10	-2.85	104.81	127.39	123.25	4.13	30.832	
1,100.00	1,099.55	1,085.25	1,085.24	2.34	2.21	-174.49	-2.33	105.06	131.11	126.61	4.49	29.173	
1,200.00	1,199.49	1,185.73	1,185.72	2.57	2.36	-174.72	-2.11	105.12	134.65	129.78	4.86	27.696	
1,300.00	1,299.43	1,283.48	1,283.47	2.80	2.55	-174.66	-2.59	105.58	138.60	133.32	5.28	26.262	
1,400.00	1,399.37	1,384.03	1,384.01	3.03	2.78	-174.59	-3.08	106.98	143.46	137.72	5.74	25.012	
1,500.00	1,499.31	1,484.43	1,484.39	3.27	3.02	-174.11	-4.64	107.72	147.67	141.47	6.20	23.828	
1,600.00	1,599.25	1,583.55	1,583.50	3.50	3.26	-173.79	-5.83	108.53	151.97	145.30	6.66	22.811	
1,700.00	1,699.19	1,684.38	1,684.32	3.73	3.50	-173.62	-6.70	109.49	156.39	149.26	7.13	21.934	
1,800.00	1,799.13	1,782.73	1,782.65	3.97	3.74	-173.22	-8.22	110.35	160.77	153.17	7.60	21.166	
1,900.00	1,899.07	1,881.20	1,881.09	4.20	3.99	-172.79	-9.89	112.29	166.23	158.16	8.07	20.589	
2,000.00	1,999.01	1,981.20	1,981.03	4.43	4.25	-172.11	-12.43	114.64	172.12	163.57	8.56	20.112	
2,100.00	2,098.94	2,080.57	2,080.34	4.67	4.51	-171.53	-14.80	116.91	177.97	168.93	9.04	19.684	
2,151.09	2,150.00	2,132.24	2,131.99	4.79	4.64	-171.37	-15.65	118.17	181.02	171.73	9.29	19.483	
2,200.00	2,198.86	2,182.32	2,182.06	4.91	4.77	-171.26	-16.36	119.06	184.23	174.71	9.52	19.343	SF
2,300.00	2,298.47	2,279.95	2,279.66	5.17	5.03	-171.15	-17.92	120.72	194.57	184.60	9.97	19.507	
2,400.00	2,397.49	2,380.90	2,380.56	5.46	5.29	-171.02	-20.41	122.80	210.44	200.03	10.40	20.230	
2,500.00	2,495.65	2,478.05	2,477.65	5.79	5.53	-170.91	-23.41	123.96	230.58	219.79	10.79	21.366	
2,600.00	2,592.69	2,575.71	2,575.26	6.17	5.77	-170.99	-26.38	125.43	256.05	244.89	11.16	22.941	
2,700.00	2,688.32	2,668.28	2,667.79	6.62	6.01	-171.36	-28.26	126.82	286.45	274.95	11.50	24.916	
2,751.12	2,736.58	2,715.47	2,714.96	6.88	6.14	-171.55	-29.29	127.99	304.36	292.70	11.66	26.110	
2,800.00	2,782.52	2,763.98	2,763.45	7.14	6.26	-171.79	-30.50	128.94	321.86	309.96	11.90	27.042	
2,900.00	2,876.49	2,855.74	2,855.16	7.70	6.49	-172.12	-33.11	130.11	357.07	344.67	12.39	28.812	
3,000.00	2,970.46	2,944.90	2,944.26	8.28	6.72	-172.42	-35.46	132.53	393.59	380.70	12.89	30.541	
3,100.00	3,064.43	3,037.49	3,036.78	8.89	6.97	-172.72	-37.61	135.43	430.53	417.13	13.40	32.134	
3,200.00	3,158.40	3,131.28	3,130.50	9.51	7.21	-172.99	-39.67	138.27	467.37	453.46	13.91	33.588	
3,300.00	3,252.36	3,225.36	3,224.53	10.15	7.46	-173.24	-41.64	140.95	504.04	489.61	14.44	34.914	
3,400.00	3,346.33	3,320.10	3,319.22	10.80	7.71	-173.48	-43.40	143.38	540.47	525.50	14.96	36.119	
3,500.00	3,440.30	3,415.04	3,414.12	11.46	7.96	-173.71	-44.92	145.52	576.61	561.12	15.49	37.218	
3,600.00	3,534.27	3,510.09	3,509.13	12.12	8.21	-173.88	-46.83	147.39	612.48	596.45	16.02	38.224	
3,700.00	3,628.24	3,605.33	3,604.32	12.80	8.45	-173.95	-49.48	148.98	648.08	631.52	16.56	39.138	
3,800.00	3,722.21	3,700.09	3,699.03	13.47	8.70	-174.01	-52.25	150.34	683.47	666.37	17.09	39.983	
3,900.00	3,816.18	3,794.98	3,793.88	14.16	8.94	-174.09	-54.68	151.52	718.68	701.05	17.63	40.763	
4,000.00	3,910.15	3,885.47	3,884.34	14.85	9.18	-174.17	-56.88	152.74	753.99	735.82	18.16	41.515	
4,100.00	4,004.11	3,975.43	3,974.25	15.54	9.41	-174.23	-59.23	154.36	789.71	771.02	18.69	42.245	
4,200.00	4,098.08	4,069.36	4,068.12	16.23	9.66	-174.27	-61.92	156.29	825.68	806.44	19.24	42.921	
4,300.00	4,192.05	4,165.04	4,163.74	16.93	9.91	-174.28	-65.02	158.02	861.41	841.63	19.79	43.534	
4,318.72	4,209.64	4,182.98	4,181.66	17.06	9.95	-174.28	-65.65	158.32	868.08	848.19	19.89	43.642	
4,400.00	4,286.40	4,260.47	4,259.09	17.55	10.15	-174.32	-68.48	159.52	895.85	875.41	20.44	43.830	
4,500.00	4,381.84	4,356.63	4,355.17	18.04	10.40	-174.32	-72.23	160.91	926.94	905.87	21.07	43.998	
4,600.00	4,478.25	4,453.00	4,451.45	18.48	10.65	-174.30	-76.07	162.20	954.61	932.94	21.67	44.049	
4,700.00	4,575.53	4,549.57	4,547.96	18.88	10.89	-174.30	-79.13	163.52	978.96	956.72	22.25	44.004	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anadarko Petroleum Corporation

Weatherford International Ltd.

Anticollision Report

Weatherford

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well BONANZA 1023-5L4AS
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Reference Site:	BONANZA 1023-5K PAD	**MD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	BONANZA 1023-5L4AS	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	BONANZA 1023-5L4AS	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 4-28-10 RHS	**Offset TVD Reference:**	Offset Datum

Offset Design BONANZA 1023-5K PAD - Bonanza 1023-5K EXISTING - Bonanza 1023-5K EXISTING - Bonanza 102 — **Offset Site Error:** 0.00 ft

Survey Program: 100-NS-GYRO-MS — **Offset Well Error:** 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4,800.00	4,673.57	4,645.59	4,643.95	19.23	11.15	-174.32	-81.40	164.91	1,000.00	977.21	22.79	43.877	
4,900.00	4,772.22	4,740.75	4,739.07	19.53	11.40	-174.30	-83.77	166.54	1,017.91	994.61	23.30	43.681	
5,000.00	4,871.39	4,837.25	4,835.51	19.79	11.65	-174.25	-86.41	168.50	1,032.69	1,008.90	23.79	43.415	
5,100.00	4,970.95	4,935.62	4,933.82	20.01	11.91	-174.18	-89.11	170.62	1,044.17	1,019.93	24.24	43.075	
5,200.00	5,070.77	5,034.72	5,032.86	20.18	12.18	-174.08	-91.76	172.85	1,052.27	1,027.61	24.66	42.670	
5,300.00	5,170.74	5,134.83	5,132.91	20.31	12.44	-173.96	-94.43	175.10	1,056.92	1,031.88	25.05	42.197	
5,318.76	5,189.50	5,153.64	5,151.70	20.33	12.49	90.45	-94.93	175.52	1,057.41	1,032.29	25.12	42.098	
5,400.00	5,270.74	5,239.91	5,237.93	20.42	12.72	90.57	-97.27	177.34	1,059.15	1,033.66	25.49	41.558	
5,500.00	5,370.74	5,354.09	5,352.05	20.54	13.00	90.75	-100.54	178.57	1,060.26	1,034.31	25.95	40.858	
5,600.00	5,470.74	5,456.48	5,454.39	20.65	13.25	90.91	-103.52	178.64	1,060.37	1,033.98	26.39	40.187	
5,700.00	5,570.74	5,550.96	5,548.86	20.77	13.48	91.02	-105.62	179.06	1,060.85	1,034.05	26.80	39.582	
5,800.00	5,670.74	5,649.64	5,647.52	20.90	13.73	91.11	-107.20	179.93	1,061.76	1,034.52	27.23	38.989	
5,900.00	5,770.74	5,752.81	5,750.67	21.02	13.99	91.22	-109.29	180.63	1,062.47	1,034.79	27.68	38.384	
6,000.00	5,870.74	5,849.10	5,846.92	21.14	14.24	91.35	-111.72	181.14	1,063.07	1,034.96	28.11	37.813	
6,100.00	5,970.74	5,939.59	5,937.37	21.27	14.47	91.47	-114.06	182.33	1,064.44	1,035.91	28.53	37.305	
6,200.00	6,070.74	6,033.45	6,031.18	21.40	14.72	91.60	-116.49	184.35	1,066.66	1,037.69	28.97	36.824	
6,300.00	6,170.74	6,134.13	6,131.79	21.53	14.98	91.74	-119.14	186.65	1,069.02	1,039.60	29.42	36.331	
6,400.00	6,270.74	6,234.02	6,231.63	21.66	15.25	91.88	-121.80	188.88	1,071.34	1,041.46	29.88	35.853	
6,500.00	6,370.74	6,332.44	6,330.00	21.79	15.51	92.00	-124.06	191.18	1,073.75	1,043.42	30.33	35.401	
6,600.00	6,470.74	6,431.38	6,428.89	21.93	15.77	92.09	-125.90	193.64	1,076.31	1,045.53	30.78	34.965	
6,700.00	6,570.74	6,531.40	6,528.85	22.06	16.03	92.20	-128.16	196.15	1,078.90	1,047.66	31.24	34.536	
6,800.00	6,670.74	6,635.06	6,632.44	22.20	16.30	92.36	-131.17	198.65	1,081.43	1,049.72	31.71	34.108	
6,900.00	6,770.74	6,746.74	6,744.05	22.34	16.59	92.53	-134.56	200.41	1,083.14	1,050.94	32.19	33.647	
7,000.00	6,870.74	6,851.05	6,848.31	22.48	16.85	92.70	-137.75	201.12	1,083.95	1,051.29	32.66	33.193	
7,100.00	6,970.74	6,948.59	6,945.79	22.62	17.10	92.88	-141.08	201.83	1,084.84	1,051.74	33.10	32.774	
7,200.00	7,070.74	7,047.53	7,044.66	22.77	17.35	93.06	-144.70	202.73	1,085.93	1,052.38	33.55	32.365	
7,300.00	7,170.74	7,100.00	7,097.10	22.91	17.48	93.15	-146.35	203.21	1,088.08	1,054.20	33.89	32.111	
7,400.00	7,270.74	7,100.00	7,097.10	23.05	17.48	93.15	-146.35	203.21	1,098.11	1,064.03	34.08	32.222	
7,500.00	7,370.74	7,100.00	7,097.10	23.20	17.48	93.15	-146.35	203.21	1,117.04	1,082.76	34.28	32.590	
7,600.00	7,470.74	7,100.00	7,097.10	23.35	17.48	93.15	-146.35	203.21	1,144.42	1,109.95	34.47	33.199	
7,700.00	7,570.74	7,100.00	7,097.10	23.50	17.48	93.15	-146.35	203.21	1,179.67	1,145.00	34.67	34.027	
7,800.00	7,670.74	7,100.00	7,097.10	23.65	17.48	93.15	-146.35	203.21	1,222.11	1,187.24	34.87	35.052	
7,900.00	7,770.74	7,100.00	7,097.10	23.80	17.48	93.15	-146.35	203.21	1,271.02	1,235.95	35.06	36.249	
8,000.00	7,870.74	7,100.00	7,097.10	23.95	17.48	93.15	-146.35	203.21	1,325.67	1,290.41	35.26	37.594	
8,100.00	7,970.74	7,100.00	7,097.10	24.11	17.48	93.15	-146.35	203.21	1,385.40	1,349.94	35.46	39.067	
8,200.00	8,070.74	7,100.00	7,097.10	24.26	17.48	93.15	-146.35	203.21	1,449.57	1,413.91	35.66	40.647	
8,300.00	8,170.74	7,100.00	7,097.10	24.42	17.48	93.15	-146.35	203.21	1,517.63	1,481.76	35.86	42.318	
8,400.00	8,270.74	7,100.00	7,097.10	24.58	17.48	93.15	-146.35	203.21	1,589.06	1,553.00	36.06	44.062	
8,500.00	8,370.74	7,100.00	7,097.10	24.73	17.48	93.15	-146.35	203.21	1,663.44	1,627.18	36.27	45.868	
8,600.00	8,470.74	7,100.00	7,097.10	24.89	17.48	93.15	-146.35	203.21	1,740.39	1,703.93	36.47	47.724	
8,639.26	8,510.00	7,100.00	7,097.10	24.96	17.48	93.15	-146.35	203.21	1,771.24	1,734.69	36.55	48.464	

Anadarko Petroleum Corporation

Weatherford International Ltd.

Anticollision Report

Weatherford

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well BONANZA 1023-5L4AS
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Reference Site:	BONANZA 1023-5K PAD	**MD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	BONANZA 1023-5L4AS	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	BONANZA 1023-5L4AS	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 4-28-10 RHS	**Offset TVD Reference:**	Offset Datum

Offset Design BONANZA 1023-5K PAD - BONANZA 1023-5K1BS - BONANZA 1023-5K1BS - PLAN #1 4-28-10 RHS

Offset Site Error: 0.00 ft

Survey Program: 0-MWD

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	88.96	0.73	40.07	40.08				
100.00	100.00	100.00	100.00	0.10	0.10	88.96	0.73	40.07	40.08	39.89	0.19	207.341	
200.00	200.00	200.00	200.00	0.32	0.32	88.96	0.73	40.07	40.08	39.44	0.64	62.347	
300.00	300.00	300.00	300.00	0.55	0.55	88.96	0.73	40.07	40.08	38.99	1.09	36.690	CC, ES
400.00	399.98	399.12	399.07	0.76	0.77	-178.84	3.15	40.94	42.81	41.28	1.53	27.919	
500.00	499.92	497.51	497.16	0.97	1.01	173.04	10.34	43.51	49.99	48.01	1.98	25.278	
600.00	599.86	594.71	593.54	1.19	1.27	163.40	22.10	47.71	61.21	58.76	2.45	24.966	SF
700.00	699.80	690.26	687.55	1.42	1.58	154.51	38.14	53.44	77.47	74.52	2.95	26.285	
800.00	799.74	783.72	778.56	1.64	1.95	147.31	58.10	60.58	99.06	95.61	3.45	28.708	
900.00	899.68	874.73	866.10	1.87	2.39	141.80	81.55	68.96	125.86	121.91	3.95	31.828	
1,000.00	999.61	969.28	956.30	2.10	2.89	137.67	108.20	78.48	155.82	151.36	4.46	34.955	
1,100.00	1,099.55	1,064.18	1,046.85	2.34	3.42	134.86	134.96	88.05	186.30	181.35	4.94	37.677	
1,200.00	1,199.49	1,159.09	1,137.41	2.57	3.96	132.83	161.73	97.61	217.07	211.64	5.43	39.945	
1,300.00	1,299.43	1,253.99	1,227.96	2.80	4.50	131.31	188.49	107.18	248.03	242.10	5.93	41.841	
1,400.00	1,399.37	1,348.90	1,318.51	3.03	5.05	130.13	215.25	116.74	279.11	272.69	6.42	43.456	
1,500.00	1,499.31	1,443.81	1,409.06	3.27	5.60	129.18	242.02	126.31	310.28	303.35	6.92	44.834	
1,600.00	1,599.25	1,538.71	1,499.61	3.50	6.15	128.41	268.78	135.87	341.50	334.08	7.42	46.023	
1,700.00	1,699.19	1,633.62	1,590.16	3.73	6.71	127.76	295.54	145.44	372.78	364.86	7.92	47.058	
1,800.00	1,799.13	1,728.53	1,680.71	3.97	7.26	127.22	322.31	155.00	404.09	395.67	8.42	47.966	
1,900.00	1,899.07	1,823.43	1,771.26	4.20	7.82	126.75	349.07	164.57	435.43	426.51	8.93	48.768	
2,000.00	1,999.01	1,918.34	1,861.81	4.43	8.38	126.34	375.83	174.13	466.80	457.36	9.43	49.481	
2,100.00	2,098.94	2,013.25	1,952.36	4.67	8.94	125.99	402.59	183.70	498.18	488.24	9.94	50.118	
2,151.09	2,150.00	2,061.73	1,998.62	4.79	9.23	125.83	416.27	188.59	514.22	504.02	10.20	50.418	
2,200.00	2,198.86	2,108.05	2,042.81	4.91	9.50	125.34	429.33	193.25	529.92	519.50	10.42	50.851	
2,300.00	2,298.47	2,201.98	2,132.44	5.17	10.05	124.62	455.82	202.72	564.15	553.27	10.88	51.838	
2,400.00	2,397.49	2,307.65	2,233.49	5.46	10.62	124.35	484.90	213.12	600.55	589.18	11.37	52.801	
2,500.00	2,495.65	2,421.30	2,343.17	5.79	11.10	124.60	512.91	223.13	636.87	625.01	11.87	53.669	
2,600.00	2,592.69	2,535.76	2,454.62	6.17	11.54	125.28	537.47	231.91	673.06	660.68	12.38	54.384	
2,700.00	2,688.32	2,650.71	2,567.38	6.62	11.95	126.32	558.43	239.40	709.33	696.42	12.90	54.969	
2,751.12	2,736.58	2,709.54	2,625.38	6.88	12.14	126.97	567.72	242.71	727.99	714.80	13.18	55.227	
2,800.00	2,782.52	2,766.11	2,681.30	7.14	12.30	128.07	575.72	245.57	745.60	732.08	13.52	55.155	
2,900.00	2,876.49	2,883.68	2,797.97	7.70	12.61	130.24	589.43	250.47	779.78	765.57	14.22	54.844	
3,000.00	2,970.46	3,003.55	2,917.37	8.28	12.87	132.33	599.33	254.01	811.41	796.49	14.92	54.379	
3,100.00	3,064.43	3,125.45	3,039.10	8.89	13.07	134.38	605.18	256.10	840.41	824.79	15.62	53.818	
3,200.00	3,158.40	3,244.76	3,158.40	9.51	13.22	136.33	606.79	256.68	866.77	850.49	16.29	53.217	
3,300.00	3,252.36	3,338.73	3,252.36	10.15	13.32	137.81	606.79	256.68	892.53	875.61	16.92	52.759	
3,400.00	3,346.33	3,432.70	3,346.33	10.80	13.42	139.20	606.79	256.68	918.83	901.29	17.54	52.372	
3,500.00	3,440.30	3,526.67	3,440.30	11.46	13.52	140.53	606.79	256.68	945.64	927.48	18.16	52.060	
3,600.00	3,534.27	3,620.64	3,534.27	12.12	13.63	141.78	606.79	256.68	972.92	954.14	18.78	51.816	
3,700.00	3,628.24	3,714.61	3,628.24	12.80	13.74	142.96	606.79	256.68	1,000.62	981.24	19.38	51.631	
3,800.00	3,722.21	3,808.57	3,722.21	13.47	13.85	144.09	606.79	256.68	1,028.71	1,008.73	19.98	51.498	
3,900.00	3,816.18	3,902.54	3,816.18	14.16	13.97	145.15	606.79	256.68	1,057.16	1,036.60	20.56	51.410	
4,000.00	3,910.15	3,996.51	3,910.15	14.85	14.08	146.17	606.79	256.68	1,085.95	1,064.80	21.14	51.362	
4,100.00	4,004.11	4,090.48	4,004.11	15.54	14.20	147.13	606.79	256.68	1,115.04	1,093.32	21.72	51.348	
4,200.00	4,098.08	4,184.45	4,098.08	16.23	14.32	148.04	606.79	256.68	1,144.41	1,122.13	22.28	51.364	
4,300.00	4,192.05	4,278.42	4,192.05	16.93	14.45	148.91	606.79	256.68	1,174.04	1,151.20	22.84	51.405	
4,318.72	4,209.64	4,296.01	4,209.64	17.06	14.47	149.07	606.79	256.68	1,179.62	1,156.68	22.94	51.416	
4,400.00	4,286.40	4,372.77	4,286.40	17.55	14.57	149.96	606.79	256.68	1,202.97	1,179.48	23.49	51.221	
4,500.00	4,381.84	4,468.20	4,381.84	18.04	14.70	150.91	606.79	256.68	1,229.23	1,205.14	24.09	51.021	
4,600.00	4,478.25	4,564.62	4,478.25	18.48	14.83	151.73	606.79	256.68	1,252.68	1,228.01	24.67	50.783	
4,700.00	4,575.53	4,661.90	4,575.53	18.88	14.97	152.41	606.79	256.68	1,273.24	1,248.03	25.21	50.509	
4,800.00	4,673.57	4,759.93	4,673.57	19.23	15.11	152.98	606.79	256.68	1,290.84	1,265.12	25.71	50.200	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Weatherford International Ltd.

Anticollision Report

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well BONANZA 1023-5L4AS
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Reference Site:	BONANZA 1023-5K PAD	**MD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	BONANZA 1023-5L4AS	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	BONANZA 1023-5L4AS	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 4-28-10 RHS	**Offset TVD Reference:**	Offset Datum

Offset Design BONANZA 1023-5K PAD - BONANZA 1023-5K1BS - BONANZA 1023-5K1BS - PLAN #1 4-28-10 RHS

Offset Site Error: 0.00 ft

Survey Program: 0-MWD

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4,900.00	4,772.22	4,858.59	4,772.22	19.53	15.25	153.44	606.79	256.68	1,305.42	1,279.23	26.18	49.855	
5,000.00	4,871.39	4,957.76	4,871.39	19.79	15.39	153.79	606.79	256.68	1,316.94	1,290.32	26.62	49.475	
5,100.00	4,970.95	5,057.31	4,970.95	20.01	15.54	154.04	606.79	256.68	1,325.36	1,298.34	27.02	49.059	
5,200.00	5,070.77	5,157.14	5,070.77	20.18	15.69	154.20	606.79	256.68	1,330.66	1,303.28	27.38	48.606	
5,300.00	5,170.74	5,257.10	5,170.74	20.31	15.84	154.26	606.79	256.68	1,332.82	1,305.12	27.70	48.114	
5,318.76	5,189.50	5,275.87	5,189.50	20.33	15.87	58.65	606.79	256.68	1,332.87	1,305.11	27.76	48.015	
5,400.00	5,270.74	5,357.10	5,270.74	20.42	15.99	58.65	606.79	256.68	1,332.87	1,304.84	28.03	47.551	
5,500.00	5,370.74	5,457.10	5,370.74	20.54	16.14	58.65	606.79	256.68	1,332.87	1,304.50	28.37	46.983	
5,600.00	5,470.74	5,557.10	5,470.74	20.65	16.30	58.65	606.79	256.68	1,332.87	1,304.16	28.71	46.424	
5,700.00	5,570.74	5,657.10	5,570.74	20.77	16.46	58.65	606.79	256.68	1,332.87	1,303.82	29.06	45.874	
5,800.00	5,670.74	5,757.10	5,670.74	20.90	16.62	58.65	606.79	256.68	1,332.87	1,303.47	29.40	45.332	
5,900.00	5,770.74	5,857.10	5,770.74	21.02	16.78	58.65	606.79	256.68	1,332.87	1,303.12	29.75	44.799	
6,000.00	5,870.74	5,957.10	5,870.74	21.14	16.94	58.65	606.79	256.68	1,332.87	1,302.77	30.11	44.274	
6,100.00	5,970.74	6,057.10	5,970.74	21.27	17.10	58.65	606.79	256.68	1,332.87	1,302.41	30.46	43.758	
6,200.00	6,070.74	6,157.10	6,070.74	21.40	17.27	58.65	606.79	256.68	1,332.87	1,302.06	30.82	43.250	
6,300.00	6,170.74	6,257.10	6,170.74	21.53	17.43	58.65	606.79	256.68	1,332.87	1,301.70	31.18	42.750	
6,400.00	6,270.74	6,357.10	6,270.74	21.66	17.60	58.65	606.79	256.68	1,332.87	1,301.33	31.54	42.259	
6,500.00	6,370.74	6,457.10	6,370.74	21.79	17.77	58.65	606.79	256.68	1,332.87	1,300.97	31.90	41.777	
6,600.00	6,470.74	6,557.10	6,470.74	21.93	17.94	58.65	606.79	256.68	1,332.87	1,300.60	32.27	41.302	
6,700.00	6,570.74	6,657.10	6,570.74	22.06	18.11	58.65	606.79	256.68	1,332.87	1,300.23	32.64	40.835	
6,800.00	6,670.74	6,757.10	6,670.74	22.20	18.28	58.65	606.79	256.68	1,332.87	1,299.86	33.01	40.377	
6,900.00	6,770.74	6,857.10	6,770.74	22.34	18.46	58.65	606.79	256.68	1,332.87	1,299.49	33.38	39.926	
7,000.00	6,870.74	6,957.10	6,870.74	22.48	18.63	58.65	606.79	256.68	1,332.87	1,299.12	33.76	39.483	
7,100.00	6,970.74	7,057.10	6,970.74	22.62	18.81	58.65	606.79	256.68	1,332.87	1,298.74	34.13	39.048	
7,200.00	7,070.74	7,157.10	7,070.74	22.77	18.98	58.65	606.79	256.68	1,332.87	1,298.36	34.51	38.620	
7,300.00	7,170.74	7,257.10	7,170.74	22.91	19.16	58.65	606.79	256.68	1,332.87	1,297.98	34.89	38.200	
7,400.00	7,270.74	7,357.10	7,270.74	23.05	19.34	58.65	606.79	256.68	1,332.87	1,297.60	35.27	37.787	
7,500.00	7,370.74	7,457.10	7,370.74	23.20	19.52	58.65	606.79	256.68	1,332.87	1,297.22	35.66	37.381	
7,600.00	7,470.74	7,557.10	7,470.74	23.35	19.70	58.65	606.79	256.68	1,332.87	1,296.83	36.04	36.983	
7,700.00	7,570.74	7,657.10	7,570.74	23.50	19.88	58.65	606.79	256.68	1,332.87	1,296.45	36.43	36.591	
7,800.00	7,670.74	7,757.10	7,670.74	23.65	20.06	58.65	606.79	256.68	1,332.87	1,296.06	36.81	36.206	
7,900.00	7,770.74	7,857.10	7,770.74	23.80	20.25	58.65	606.79	256.68	1,332.87	1,295.67	37.20	35.827	
8,000.00	7,870.74	7,957.10	7,870.74	23.95	20.43	58.65	606.79	256.68	1,332.87	1,295.28	37.59	35.456	
8,100.00	7,970.74	8,057.10	7,970.74	24.11	20.61	58.65	606.79	256.68	1,332.87	1,294.89	37.98	35.090	
8,200.00	8,070.74	8,157.10	8,070.74	24.26	20.80	58.65	606.79	256.68	1,332.87	1,294.50	38.38	34.731	
8,300.00	8,170.74	8,257.10	8,170.74	24.42	20.99	58.65	606.79	256.68	1,332.87	1,294.10	38.77	34.378	
8,400.00	8,270.74	8,357.10	8,270.74	24.58	21.17	58.65	606.79	256.68	1,332.87	1,293.71	39.17	34.032	
8,500.00	8,370.74	8,457.10	8,370.74	24.73	21.36	58.65	606.79	256.68	1,332.87	1,293.31	39.56	33.691	
8,600.00	8,470.74	8,557.10	8,470.74	24.89	21.55	58.65	606.79	256.68	1,332.87	1,292.91	39.96	33.356	
8,623.34	8,494.07	8,580.44	8,494.07	24.93	21.59	58.65	606.79	256.68	1,332.87	1,292.82	40.05	33.278	
8,639.26	8,510.00	8,589.37	8,503.00	24.96	21.61	58.65	606.79	256.68	1,332.89	1,292.79	40.10	33.238	

Anadarko Petroleum Corporation

Weatherford International Ltd.

Anticollision Report

Weatherford

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well BONANZA 1023-5L4AS
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Reference Site:	BONANZA 1023-5K PAD	**MD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	BONANZA 1023-5L4AS	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	BONANZA 1023-5L4AS	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 4-28-10 RHS	**Offset TVD Reference:**	Offset Datum

Offset Design BONANZA 1023-5K PAD - BONANZA 1023-5K1CS - BONANZA 1023-5K1CS - PLAN #1 4-28-10 RHS — **Offset Site Error:** 0.00 ft

Survey Program: 0-MWD — **Offset Well Error:** 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	89.17	0.73	50.16	50.17				
100.00	100.00	100.00	100.00	0.10	0.10	89.17	0.73	50.16	50.17	49.97	0.19	259.523	
200.00	200.00	200.00	200.00	0.32	0.32	89.17	0.73	50.16	50.17	49.52	0.64	78.038	
300.00	300.00	300.00	300.00	0.55	0.55	89.17	0.73	50.16	50.17	49.07	1.09	45.924	CC, ES
400.00	399.98	398.69	398.65	0.76	0.77	-177.84	3.03	51.26	53.11	51.58	1.53	34.650	
500.00	499.92	496.64	496.29	0.97	1.01	175.76	9.85	54.52	60.73	58.76	1.98	30.745	
600.00	599.86	594.59	593.51	1.19	1.26	168.11	20.65	59.69	71.95	69.51	2.45	29.408	
700.00	699.80	693.46	691.55	1.42	1.55	162.22	32.14	65.18	84.62	81.71	2.91	29.060	
800.00	799.74	792.34	789.60	1.64	1.84	157.90	43.63	70.68	97.94	94.56	3.38	28.998	
900.00	899.68	891.21	887.65	1.87	2.15	154.61	55.12	76.18	111.68	107.83	3.84	29.057	
1,000.00	999.61	990.08	985.70	2.10	2.46	152.05	66.62	81.67	125.69	121.39	4.31	29.167	
1,100.00	1,099.55	1,088.96	1,083.75	2.34	2.77	150.01	78.11	87.17	139.91	135.13	4.78	29.296	
1,200.00	1,199.49	1,187.83	1,181.80	2.57	3.08	148.35	89.60	92.66	154.27	149.03	5.24	29.427	
1,300.00	1,299.43	1,286.70	1,279.85	2.80	3.39	146.96	101.09	98.16	168.73	163.02	5.71	29.553	
1,400.00	1,399.37	1,385.58	1,377.90	3.03	3.71	145.80	112.58	103.66	183.28	177.10	6.18	29.673	
1,500.00	1,499.31	1,484.45	1,475.95	3.27	4.02	144.81	124.08	109.15	197.88	191.24	6.64	29.784	
1,600.00	1,599.25	1,583.32	1,574.00	3.50	4.34	143.95	135.57	114.65	212.54	205.43	7.11	29.887	
1,700.00	1,699.19	1,682.20	1,672.05	3.73	4.66	143.21	147.06	120.14	227.24	219.66	7.58	29.981	
1,800.00	1,799.13	1,781.07	1,770.10	3.97	4.97	142.56	158.55	125.64	241.97	233.93	8.05	30.068	
1,900.00	1,899.07	1,879.94	1,868.15	4.20	5.29	141.98	170.04	131.14	256.73	248.22	8.52	30.147	
2,000.00	1,999.01	1,978.82	1,966.20	4.43	5.61	141.46	181.53	136.63	271.51	262.53	8.98	30.220	
2,100.00	2,098.94	2,077.69	2,064.25	4.67	5.93	141.00	193.03	142.13	286.31	276.86	9.45	30.288	
2,151.09	2,150.00	2,128.20	2,114.34	4.79	6.09	140.78	198.90	144.94	293.88	284.19	9.69	30.320	
2,200.00	2,198.86	2,176.50	2,162.23	4.91	6.24	140.51	204.51	147.62	301.61	291.70	9.91	30.432	
2,300.00	2,298.47	2,284.02	2,269.05	5.17	6.51	140.51	215.60	152.92	319.03	308.70	10.33	30.893	
2,400.00	2,397.49	2,392.32	2,376.97	5.46	6.75	141.30	223.57	156.73	337.43	326.70	10.73	31.445	
2,500.00	2,495.65	2,500.56	2,485.08	5.79	6.95	142.74	228.31	159.00	357.00	345.88	11.13	32.086	
2,600.00	2,592.69	2,608.18	2,592.69	6.17	7.12	144.70	229.82	159.73	378.08	366.57	11.51	32.849	
2,700.00	2,688.32	2,703.82	2,688.32	6.62	7.28	146.66	229.82	159.73	402.52	390.64	11.88	33.895	
2,751.12	2,736.58	2,752.08	2,736.58	6.88	7.36	147.67	229.82	159.73	416.90	404.84	12.07	34.554	
2,800.00	2,782.52	2,798.01	2,782.52	7.14	7.44	148.84	229.82	159.73	431.36	419.04	12.31	35.029	
2,900.00	2,876.49	2,891.98	2,876.49	7.70	7.60	151.01	229.82	159.73	461.40	448.58	12.82	35.979	
3,000.00	2,970.46	2,985.95	2,970.46	8.28	7.77	152.92	229.82	159.73	492.00	478.66	13.33	36.901	
3,100.00	3,064.43	3,079.92	3,064.43	8.89	7.93	154.60	229.82	159.73	523.03	509.20	13.84	37.793	
3,200.00	3,158.40	3,173.89	3,158.40	9.51	8.10	156.11	229.82	159.73	554.45	540.10	14.34	38.654	
3,300.00	3,252.36	3,267.86	3,252.36	10.15	8.28	157.45	229.82	159.73	586.17	571.32	14.85	39.483	
3,400.00	3,346.33	3,361.83	3,346.33	10.80	8.45	158.66	229.82	159.73	618.16	602.81	15.35	40.279	
3,500.00	3,440.30	3,455.80	3,440.30	11.46	8.62	159.74	229.82	159.73	650.37	634.53	15.85	41.042	
3,600.00	3,534.27	3,549.76	3,534.27	12.12	8.80	160.73	229.82	159.73	682.78	666.44	16.35	41.773	
3,700.00	3,628.24	3,643.73	3,628.24	12.80	8.98	161.63	229.82	159.73	715.35	698.51	16.84	42.471	
3,800.00	3,722.21	3,737.70	3,722.21	13.47	9.16	162.45	229.82	159.73	748.07	730.73	17.34	43.139	
3,900.00	3,816.18	3,831.67	3,816.18	14.16	9.34	163.20	229.82	159.73	780.92	763.08	17.84	43.776	
4,000.00	3,910.15	3,925.64	3,910.15	14.85	9.52	163.90	229.82	159.73	813.88	795.54	18.34	44.385	
4,100.00	4,004.11	4,019.61	4,004.11	15.54	9.71	164.54	229.82	159.73	846.94	828.10	18.84	44.966	
4,200.00	4,098.08	4,113.58	4,098.08	16.23	9.89	165.13	229.82	159.73	880.08	860.75	19.33	45.520	
4,300.00	4,192.05	4,207.55	4,192.05	16.93	10.08	165.68	229.82	159.73	913.31	893.47	19.83	46.049	
4,318.72	4,209.64	4,225.14	4,209.64	17.06	10.11	165.77	229.82	159.73	919.54	899.61	19.93	46.145	
4,400.00	4,286.40	4,301.90	4,286.40	17.55	10.26	166.30	229.82	159.73	945.54	925.12	20.42	46.302	
4,500.00	4,381.84	4,397.33	4,381.84	18.04	10.45	166.86	229.82	159.73	974.66	953.67	20.99	46.439	
4,600.00	4,478.25	4,493.75	4,478.25	18.48	10.65	167.32	229.82	159.73	1,000.55	979.01	21.53	46.469	
4,700.00	4,575.53	4,591.03	4,575.53	18.88	10.84	167.70	229.82	159.73	1,023.16	1,001.11	22.05	46.403	
4,800.00	4,673.57	4,689.06	4,673.57	19.23	11.04	168.01	229.82	159.73	1,042.46	1,019.92	22.54	46.250	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Weatherford International Ltd.

Anticollision Report

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well BONANZA 1023-5L4AS
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Reference Site:	BONANZA 1023-5K PAD	**MD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	BONANZA 1023-5L4AS	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	BONANZA 1023-5L4AS	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 4-28-10 RHS	**Offset TVD Reference:**	Offset Datum

Offset Design BONANZA 1023-5K PAD - BONANZA 1023-5K1CS - BONANZA 1023-5K1CS - PLAN #1 4-28-10 RHS — **Offset Site Error:** 0.00 ft

Survey Program: 0-MWD — **Offset Well Error:** 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4,900.00	4,772.22	4,787.72	4,772.22	19.53	11.24	168.26	229.82	159.73	1,058.41	1,035.41	23.00	46.017	
5,000.00	4,871.39	4,886.89	4,871.39	19.79	11.44	168.45	229.82	159.73	1,070.98	1,047.55	23.43	45.708	
5,100.00	4,970.95	4,986.44	4,970.95	20.01	11.65	168.59	229.82	159.73	1,080.17	1,056.34	23.83	45.329	
5,200.00	5,070.77	5,086.26	5,070.77	20.18	11.85	168.67	229.82	159.73	1,085.94	1,061.74	24.20	44.881	
5,300.00	5,170.74	5,186.23	5,170.74	20.31	12.06	168.71	229.82	159.73	1,088.29	1,063.76	24.53	44.368	
5,318.76	5,189.50	5,204.99	5,189.50	20.33	12.10	73.09	229.82	159.73	1,088.35	1,063.76	24.59	44.262	
5,400.00	5,270.74	5,286.23	5,270.74	20.42	12.27	73.09	229.82	159.73	1,088.35	1,063.45	24.90	43.707	
5,500.00	5,370.74	5,386.23	5,370.74	20.54	12.47	73.09	229.82	159.73	1,088.35	1,063.06	25.29	43.038	
5,600.00	5,470.74	5,486.23	5,470.74	20.65	12.68	73.09	229.82	159.73	1,088.35	1,062.67	25.68	42.387	
5,700.00	5,570.74	5,586.23	5,570.74	20.77	12.89	73.09	229.82	159.73	1,088.35	1,062.28	26.07	41.751	
5,800.00	5,670.74	5,686.23	5,670.74	20.90	13.10	73.09	229.82	159.73	1,088.35	1,061.89	26.46	41.132	
5,900.00	5,770.74	5,786.23	5,770.74	21.02	13.31	73.09	229.82	159.73	1,088.35	1,061.50	26.85	40.528	
6,000.00	5,870.74	5,886.23	5,870.74	21.14	13.52	73.09	229.82	159.73	1,088.35	1,061.10	27.25	39.940	
6,100.00	5,970.74	5,986.23	5,970.74	21.27	13.73	73.09	229.82	159.73	1,088.35	1,060.70	27.65	39.366	
6,200.00	6,070.74	6,086.23	6,070.74	21.40	13.94	73.09	229.82	159.73	1,088.35	1,060.31	28.05	38.806	
6,300.00	6,170.74	6,186.23	6,170.74	21.53	14.15	73.09	229.82	159.73	1,088.35	1,059.91	28.45	38.260	
6,400.00	6,270.74	6,286.23	6,270.74	21.66	14.36	73.09	229.82	159.73	1,088.35	1,059.50	28.85	37.727	
6,500.00	6,370.74	6,386.23	6,370.74	21.79	14.58	73.09	229.82	159.73	1,088.35	1,059.10	29.25	37.207	
6,600.00	6,470.74	6,486.23	6,470.74	21.93	14.79	73.09	229.82	159.73	1,088.35	1,058.70	29.66	36.700	
6,700.00	6,570.74	6,586.23	6,570.74	22.06	15.00	73.09	229.82	159.73	1,088.35	1,058.29	30.06	36.205	
6,800.00	6,670.74	6,686.23	6,670.74	22.20	15.22	73.09	229.82	159.73	1,088.35	1,057.88	30.47	35.721	
6,900.00	6,770.74	6,786.23	6,770.74	22.34	15.43	73.09	229.82	159.73	1,088.35	1,057.48	30.88	35.249	
7,000.00	6,870.74	6,886.23	6,870.74	22.48	15.64	73.09	229.82	159.73	1,088.35	1,057.07	31.28	34.789	
7,100.00	6,970.74	6,986.23	6,970.74	22.62	15.86	73.09	229.82	159.73	1,088.35	1,056.66	31.69	34.338	
7,200.00	7,070.74	7,086.23	7,070.74	22.77	16.07	73.09	229.82	159.73	1,088.35	1,056.25	32.11	33.899	
7,300.00	7,170.74	7,186.23	7,170.74	22.91	16.29	73.09	229.82	159.73	1,088.35	1,055.83	32.52	33.469	
7,400.00	7,270.74	7,286.23	7,270.74	23.05	16.50	73.09	229.82	159.73	1,088.35	1,055.42	32.93	33.049	
7,500.00	7,370.74	7,386.23	7,370.74	23.20	16.72	73.09	229.82	159.73	1,088.35	1,055.01	33.35	32.639	
7,600.00	7,470.74	7,486.23	7,470.74	23.35	16.93	73.09	229.82	159.73	1,088.35	1,054.59	33.76	32.238	
7,700.00	7,570.74	7,586.23	7,570.74	23.50	17.15	73.09	229.82	159.73	1,088.35	1,054.18	34.18	31.846	
7,800.00	7,670.74	7,686.23	7,670.74	23.65	17.36	73.09	229.82	159.73	1,088.35	1,053.76	34.59	31.462	
7,900.00	7,770.74	7,786.23	7,770.74	23.80	17.58	73.09	229.82	159.73	1,088.35	1,053.34	35.01	31.087	
8,000.00	7,870.74	7,886.23	7,870.74	23.95	17.80	73.09	229.82	159.73	1,088.35	1,052.92	35.43	30.720	
8,100.00	7,970.74	7,986.23	7,970.74	24.11	18.01	73.09	229.82	159.73	1,088.35	1,052.51	35.85	30.361	
8,200.00	8,070.74	8,086.23	8,070.74	24.26	18.23	73.09	229.82	159.73	1,088.35	1,052.09	36.27	30.010	
8,300.00	8,170.74	8,186.23	8,170.74	24.42	18.45	73.09	229.82	159.73	1,088.35	1,051.67	36.69	29.666	
8,400.00	8,270.74	8,286.23	8,270.74	24.58	18.67	73.09	229.82	159.73	1,088.35	1,051.24	37.11	29.330	
8,500.00	8,370.74	8,386.23	8,370.74	24.73	18.88	73.09	229.82	159.73	1,088.35	1,050.82	37.53	29.000	
8,600.00	8,470.74	8,486.23	8,470.74	24.89	19.10	73.09	229.82	159.73	1,088.35	1,050.40	37.95	28.678	
8,618.09	8,488.82	8,504.31	8,488.82	24.92	19.14	73.09	229.82	159.73	1,088.35	1,050.32	38.03	28.620	
8,639.26	8,510.00	8,510.49	8,495.00	24.96	19.15	73.09	229.82	159.73	1,088.46	1,050.37	38.08	28.580	SF

Anadarko Petroleum Corporation

Weatherford International Ltd.

Anticollision Report

Weatherford

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well BONANZA 1023-5L4AS
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Reference Site:	BONANZA 1023-5K PAD	**MD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	BONANZA 1023-5L4AS	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	BONANZA 1023-5L4AS	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 4-28-10 RHS	**Offset TVD Reference:**	Offset Datum

Offset Design BONANZA 1023-5K PAD - BONANZA 1023-5K3DS - BONANZA 1023-5K3DS - PLAN #1 4-28-10 RHS — **Offset Site Error:** 0.00 ft

Survey Program: 0-MWD — **Offset Well Error:** 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	88.61	0.73	29.98	29.99				
100.00	100.00	100.00	100.00	0.10	0.10	88.61	0.73	29.98	29.99	29.80	0.19	155.163	
200.00	200.00	200.00	200.00	0.32	0.32	88.61	0.73	29.98	29.99	29.35	0.64	46.658	
300.00	300.00	300.00	300.00	0.55	0.55	88.61	0.73	29.98	29.99	28.90	1.09	27.457	CC, ES
400.00	399.98	399.94	399.89	0.76	0.75	-171.29	-1.89	29.98	31.76	30.25	1.51	21.061	
500.00	499.92	499.33	498.97	0.97	0.96	-159.78	-9.66	29.97	36.36	34.44	1.92	18.908	
600.00	599.86	597.68	596.48	1.19	1.21	-145.11	-22.42	29.94	44.37	41.97	2.40	18.506	SF
700.00	699.80	694.51	691.71	1.42	1.54	-131.57	-39.87	29.91	57.72	54.81	2.91	19.846	
800.00	799.74	790.52	785.23	1.64	1.93	-121.21	-61.57	29.88	76.71	73.29	3.43	22.379	
900.00	899.68	887.73	879.72	1.87	2.37	-114.66	-84.43	29.84	98.03	94.11	3.92	25.003	
1,000.00	999.61	984.95	974.21	2.10	2.83	-110.46	-107.30	29.80	120.13	115.72	4.41	27.256	
1,100.00	1,099.55	1,082.17	1,068.70	2.34	3.29	-107.58	-130.17	29.76	142.65	137.76	4.90	29.142	
1,200.00	1,199.49	1,179.38	1,163.19	2.57	3.76	-105.48	-153.03	29.71	165.43	160.05	5.38	30.724	
1,300.00	1,299.43	1,276.60	1,257.67	2.80	4.23	-103.89	-175.90	29.67	188.37	182.49	5.88	32.057	
1,400.00	1,399.37	1,373.82	1,352.16	3.03	4.71	-102.65	-198.77	29.63	211.41	205.04	6.37	33.192	
1,500.00	1,499.31	1,471.03	1,446.65	3.27	5.18	-101.65	-221.63	29.59	234.53	227.67	6.86	34.168	
1,600.00	1,599.25	1,568.25	1,541.14	3.50	5.66	-100.82	-244.50	29.55	257.71	250.35	7.36	35.013	
1,700.00	1,699.19	1,665.47	1,635.63	3.73	6.14	-100.14	-267.36	29.51	280.93	273.07	7.86	35.751	
1,800.00	1,799.13	1,762.68	1,730.12	3.97	6.62	-99.56	-290.23	29.47	304.18	295.82	8.36	36.400	
1,900.00	1,899.07	1,859.90	1,824.61	4.20	7.11	-99.06	-313.10	29.43	327.45	318.60	8.86	36.976	
2,000.00	1,999.01	1,957.12	1,919.10	4.43	7.59	-98.63	-335.96	29.39	350.75	341.39	9.36	37.489	
2,100.00	2,098.94	2,054.34	2,013.59	4.67	8.07	-98.25	-358.83	29.35	374.06	364.20	9.86	37.950	
2,151.09	2,150.00	2,104.00	2,061.86	4.79	8.32	-98.07	-370.51	29.33	385.97	375.86	10.11	38.167	
2,200.00	2,198.86	2,151.54	2,108.07	4.91	8.55	-97.65	-381.69	29.31	397.47	387.12	10.35	38.405	
2,300.00	2,298.47	2,258.44	2,212.19	5.17	8.98	-97.44	-405.90	29.27	420.66	409.80	10.86	38.722	
2,400.00	2,397.49	2,370.04	2,321.65	5.46	9.33	-98.16	-427.66	29.23	441.54	430.12	11.42	38.659	
2,500.00	2,495.65	2,482.03	2,432.16	5.79	9.66	-99.70	-445.72	29.20	460.26	448.23	12.03	38.248	
2,600.00	2,592.69	2,593.76	2,542.97	6.17	9.94	-101.95	-459.97	29.18	477.33	464.63	12.71	37.570	
2,700.00	2,688.32	2,704.57	2,653.29	6.62	10.18	-104.82	-470.35	29.16	493.45	480.01	13.43	36.729	
2,751.12	2,736.58	2,760.65	2,709.24	6.88	10.29	-106.49	-474.19	29.15	501.59	487.77	13.83	36.276	
2,800.00	2,782.52	2,814.08	2,762.60	7.14	10.38	-108.36	-476.95	29.15	509.29	495.05	14.24	35.768	
2,900.00	2,876.49	2,923.39	2,871.86	7.70	10.53	-112.15	-479.88	29.14	524.29	509.21	15.08	34.771	
3,000.00	2,970.46	3,021.99	2,970.46	8.28	10.65	-115.51	-480.04	29.14	539.01	523.13	15.88	33.942	
3,100.00	3,064.43	3,115.96	3,064.43	8.89	10.76	-118.55	-480.04	29.14	555.33	538.68	16.65	33.350	
3,200.00	3,158.40	3,209.93	3,158.40	9.51	10.87	-121.42	-480.04	29.14	573.24	555.83	17.40	32.937	
3,300.00	3,252.36	3,303.89	3,252.36	10.15	10.98	-124.13	-480.04	29.14	592.57	574.44	18.13	32.678	
3,400.00	3,346.33	3,397.86	3,346.33	10.80	11.09	-126.67	-480.04	29.14	613.21	594.37	18.84	32.552	
3,500.00	3,440.30	3,491.83	3,440.30	11.46	11.21	-129.06	-480.04	29.14	635.02	615.50	19.52	32.538	
3,600.00	3,534.27	3,585.80	3,534.27	12.12	11.33	-131.30	-480.04	29.14	657.88	637.72	20.17	32.617	
3,700.00	3,628.24	3,679.77	3,628.24	12.80	11.45	-133.39	-480.04	29.14	681.70	660.90	20.80	32.774	
3,800.00	3,722.21	3,773.74	3,722.21	13.47	11.58	-135.35	-480.04	29.14	706.37	684.96	21.41	32.996	
3,900.00	3,816.18	3,867.71	3,816.18	14.16	11.71	-137.18	-480.04	29.14	731.81	709.81	22.00	33.270	
4,000.00	3,910.15	3,961.68	3,910.15	14.85	11.84	-138.89	-480.04	29.14	757.93	735.37	22.57	33.587	
4,100.00	4,004.11	4,055.64	4,004.11	15.54	11.97	-140.49	-480.04	29.14	784.68	761.56	23.12	33.939	
4,200.00	4,098.08	4,149.61	4,098.08	16.23	12.11	-141.99	-480.04	29.14	811.99	788.33	23.66	34.318	
4,300.00	4,192.05	4,243.58	4,192.05	16.93	12.24	-143.40	-480.04	29.14	839.80	815.61	24.19	34.718	
4,318.72	4,209.64	4,261.17	4,209.64	17.06	12.27	-143.65	-480.04	29.14	845.06	820.77	24.29	34.795	
4,400.00	4,286.40	4,337.93	4,286.40	17.55	12.38	-144.95	-480.04	29.14	867.17	842.43	24.74	35.053	
4,500.00	4,381.84	4,433.37	4,381.84	18.04	12.53	-146.32	-480.04	29.14	892.17	866.96	25.22	35.377	
4,600.00	4,478.25	4,529.78	4,478.25	18.48	12.67	-147.48	-480.04	29.14	914.62	888.95	25.68	35.619	
4,700.00	4,575.53	4,627.07	4,575.53	18.88	12.82	-148.45	-480.04	29.14	934.38	908.27	26.11	35.781	
4,800.00	4,673.57	4,725.10	4,673.57	19.23	12.98	-149.24	-480.04	29.14	951.35	924.82	26.53	35.865	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Weatherford International Ltd.

Anticollision Report

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well BONANZA 1023-5L4AS
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Reference Site:	BONANZA 1023-5K PAD	**MD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	BONANZA 1023-5L4AS	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	BONANZA 1023-5L4AS	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 4-28-10 RHS	**Offset TVD Reference:**	Offset Datum

Offset Design BONANZA 1023-5K PAD - BONANZA 1023-5K3DS - BONANZA 1023-5K3DS - PLAN #1 4-28-10 RHS

Offset Site Error: 0.00 ft

Survey Program: 0-MWD

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4,900.00	4,772.22	4,823.76	4,772.22	19.53	13.13	-149.88	-480.04	29.14	965.44	938.53	26.91	35.873	
5,000.00	4,871.39	4,922.92	4,871.39	19.79	13.29	-150.37	-480.04	29.14	976.60	949.32	27.27	35.807	
5,100.00	4,970.95	5,022.48	4,970.95	20.01	13.45	-150.72	-480.04	29.14	984.76	957.15	27.61	35.667	
5,200.00	5,070.77	5,122.30	5,070.77	20.18	13.62	-150.93	-480.04	29.14	989.91	961.99	27.92	35.457	
5,300.00	5,170.74	5,222.27	5,170.74	20.31	13.78	-151.02	-480.04	29.14	992.00	963.80	28.20	35.175	
5,318.76	5,189.50	5,241.03	5,189.50	20.33	13.81	113.36	-480.04	29.14	992.06	963.80	28.25	35.113	
5,400.00	5,270.74	5,322.27	5,270.74	20.42	13.95	113.36	-480.04	29.14	992.06	963.54	28.51	34.791	
5,500.00	5,370.74	5,422.27	5,370.74	20.54	14.12	113.36	-480.04	29.14	992.06	963.22	28.84	34.399	
5,600.00	5,470.74	5,522.27	5,470.74	20.65	14.29	113.36	-480.04	29.14	992.06	962.89	29.17	34.012	
5,700.00	5,570.74	5,622.27	5,570.74	20.77	14.46	113.36	-480.04	29.14	992.06	962.56	29.50	33.630	
5,800.00	5,670.74	5,722.27	5,670.74	20.90	14.63	113.36	-480.04	29.14	992.06	962.22	29.83	33.253	
5,900.00	5,770.74	5,822.27	5,770.74	21.02	14.81	113.36	-480.04	29.14	992.06	961.89	30.17	32.882	
6,000.00	5,870.74	5,922.27	5,870.74	21.14	14.98	113.36	-480.04	29.14	992.06	961.55	30.51	32.515	
6,100.00	5,970.74	6,022.27	5,970.74	21.27	15.16	113.36	-480.04	29.14	992.06	961.20	30.85	32.154	
6,200.00	6,070.74	6,122.27	6,070.74	21.40	15.34	113.36	-480.04	29.14	992.06	960.86	31.20	31.798	
6,300.00	6,170.74	6,222.27	6,170.74	21.53	15.52	113.36	-480.04	29.14	992.06	960.51	31.55	31.447	
6,400.00	6,270.74	6,322.27	6,270.74	21.66	15.70	113.36	-480.04	29.14	992.06	960.16	31.90	31.101	
6,500.00	6,370.74	6,422.27	6,370.74	21.79	15.88	113.36	-480.04	29.14	992.06	959.81	32.25	30.760	
6,600.00	6,470.74	6,522.27	6,470.74	21.93	16.07	113.36	-480.04	29.14	992.06	959.45	32.61	30.425	
6,700.00	6,570.74	6,622.27	6,570.74	22.06	16.25	113.36	-480.04	29.14	992.06	959.09	32.96	30.095	
6,800.00	6,670.74	6,722.27	6,670.74	22.20	16.44	113.36	-480.04	29.14	992.06	958.73	33.32	29.770	
6,900.00	6,770.74	6,822.27	6,770.74	22.34	16.62	113.36	-480.04	29.14	992.06	958.37	33.69	29.450	
7,000.00	6,870.74	6,922.27	6,870.74	22.48	16.81	113.36	-480.04	29.14	992.06	958.01	34.05	29.135	
7,100.00	6,970.74	7,022.27	6,970.74	22.62	17.00	113.36	-480.04	29.14	992.06	957.64	34.42	28.825	
7,200.00	7,070.74	7,122.27	7,070.74	22.77	17.19	113.36	-480.04	29.14	992.06	957.27	34.79	28.520	
7,300.00	7,170.74	7,222.27	7,170.74	22.91	17.38	113.36	-480.04	29.14	992.06	956.90	35.16	28.219	
7,400.00	7,270.74	7,322.27	7,270.74	23.05	17.57	113.36	-480.04	29.14	992.06	956.53	35.53	27.924	
7,500.00	7,370.74	7,422.27	7,370.74	23.20	17.76	113.36	-480.04	29.14	992.06	956.16	35.90	27.634	
7,600.00	7,470.74	7,522.27	7,470.74	23.35	17.95	113.36	-480.04	29.14	992.06	955.78	36.28	27.348	
7,700.00	7,570.74	7,622.27	7,570.74	23.50	18.14	113.36	-480.04	29.14	992.06	955.41	36.65	27.066	
7,800.00	7,670.74	7,722.27	7,670.74	23.65	18.34	113.36	-480.04	29.14	992.06	955.03	37.03	26.790	
7,900.00	7,770.74	7,822.27	7,770.74	23.80	18.53	113.36	-480.04	29.14	992.06	954.65	37.41	26.518	
8,000.00	7,870.74	7,922.27	7,870.74	23.95	18.73	113.36	-480.04	29.14	992.06	954.27	37.79	26.250	
8,100.00	7,970.74	8,022.27	7,970.74	24.11	18.92	113.36	-480.04	29.14	992.06	953.88	38.18	25.986	
8,200.00	8,070.74	8,122.27	8,070.74	24.26	19.12	113.36	-480.04	29.14	992.06	953.50	38.56	25.727	
8,300.00	8,170.74	8,222.27	8,170.74	24.42	19.31	113.36	-480.04	29.14	992.06	953.11	38.95	25.472	
8,400.00	8,270.74	8,322.27	8,270.74	24.58	19.51	113.36	-480.04	29.14	992.06	952.72	39.33	25.222	
8,500.00	8,370.74	8,422.27	8,370.74	24.73	19.71	113.36	-480.04	29.14	992.06	952.34	39.72	24.975	
8,565.73	8,436.46	8,488.00	8,436.46	24.84	19.84	113.36	-480.04	29.14	992.06	952.08	39.98	24.815	
8,600.00	8,470.74	8,519.53	8,468.00	24.89	19.90	113.36	-480.04	29.14	992.06	951.96	40.11	24.736	
8,639.26	8,510.00	8,519.53	8,468.00	24.96	19.90	113.36	-480.04	29.14	992.95	952.77	40.18	24.712	

Anadarko Petroleum Corporation

Weatherford International Ltd.

Anticollision Report

Weatherford

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well BONANZA 1023-5L4AS
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Reference Site:	BONANZA 1023-5K PAD	**MD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	BONANZA 1023-5L4AS	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	BONANZA 1023-5L4AS	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 4-28-10 RHS	**Offset TVD Reference:**	Offset Datum

Offset Design BONANZA 1023-5K PAD - BONANZA 1023-5L1DS - BONANZA 1023-5L1DS - PLAN #1 4-28-10 RHS — **Offset Site Error:** 0.00 ft

Survey Program: 0-MWD — **Offset Well Error:** 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	87.93	0.36	10.09	10.09				
100.00	100.00	100.00	100.00	0.10	0.10	87.93	0.36	10.09	10.09	9.90	0.19	52.223	
200.00	200.00	200.00	200.00	0.32	0.32	87.93	0.36	10.09	10.09	9.45	0.64	15.703	
300.00	300.00	300.00	300.00	0.55	0.55	87.93	0.36	10.09	10.09	9.00	1.09	9.241	
400.00	399.98	400.32	400.30	0.76	0.77	179.15	0.98	8.44	10.25	8.73	1.52	6.727	
500.00	499.92	500.45	500.31	0.97	0.99	166.41	2.68	3.94	9.70	7.75	1.95	4.982	
589.60	589.46	590.01	589.75	1.17	1.19	152.47	4.33	-0.44	9.41	7.07	2.34	4.018	CC
600.00	599.86	600.41	600.14	1.19	1.22	150.82	4.52	-0.95	9.42	7.03	2.39	3.941	
700.00	699.80	700.38	699.97	1.42	1.45	135.46	6.36	-5.85	9.85	6.99	2.85	3.453	ES
800.00	799.74	800.34	799.80	1.64	1.69	122.23	8.21	-10.75	10.90	7.58	3.32	3.280	
900.00	899.68	900.31	899.62	1.87	1.93	111.77	10.05	-15.64	12.42	8.62	3.80	3.271	SF
1,000.00	999.61	1,000.28	999.45	2.10	2.17	103.80	11.89	-20.54	14.26	9.99	4.27	3.339	
1,100.00	1,099.55	1,100.24	1,099.28	2.34	2.41	97.73	13.74	-25.44	16.31	11.57	4.74	3.439	
1,200.00	1,199.49	1,200.21	1,199.11	2.57	2.66	93.06	15.58	-30.33	18.50	13.29	5.21	3.549	
1,300.00	1,299.43	1,300.17	1,298.94	2.80	2.90	89.40	17.42	-35.23	20.79	15.11	5.68	3.659	
1,400.00	1,399.37	1,400.14	1,398.77	3.03	3.14	86.47	19.27	-40.12	23.15	17.00	6.15	3.763	
1,500.00	1,499.31	1,500.11	1,498.60	3.27	3.38	84.09	21.11	-45.02	25.55	18.93	6.62	3.860	
1,600.00	1,599.25	1,600.07	1,598.43	3.50	3.63	82.12	22.95	-49.92	28.00	20.91	7.09	3.950	
1,700.00	1,699.19	1,700.04	1,698.26	3.73	3.87	80.47	24.80	-54.81	30.47	22.91	7.56	4.032	
1,800.00	1,799.13	1,800.00	1,798.09	3.97	4.11	79.07	26.64	-59.71	32.96	24.93	8.02	4.107	
1,900.00	1,899.07	1,899.97	1,897.91	4.20	4.36	77.87	28.48	-64.61	35.47	26.97	8.49	4.176	
2,000.00	1,999.01	1,999.94	1,997.74	4.43	4.60	76.82	30.33	-69.50	37.99	29.03	8.96	4.239	
2,100.00	2,098.94	2,099.90	2,097.57	4.67	4.85	75.91	32.17	-74.40	40.52	31.09	9.43	4.297	
2,151.09	2,150.00	2,150.97	2,148.57	4.79	4.97	75.48	33.11	-76.90	41.82	32.15	9.67	4.325	
2,200.00	2,198.86	2,199.47	2,197.00	4.91	5.09	75.67	34.07	-79.45	43.03	33.13	9.90	4.345	
2,300.00	2,298.47	2,297.91	2,295.01	5.17	5.36	77.23	37.27	-87.94	46.91	36.48	10.43	4.499	
2,400.00	2,397.49	2,396.14	2,392.21	5.46	5.66	79.59	42.23	-101.11	52.92	41.90	11.01	4.805	
2,500.00	2,495.65	2,494.10	2,488.30	5.79	6.01	82.23	48.92	-118.89	61.14	49.46	11.68	5.235	
2,600.00	2,592.69	2,591.71	2,582.95	6.17	6.40	84.79	57.31	-141.16	71.62	59.17	12.45	5.755	
2,700.00	2,688.32	2,688.90	2,675.87	6.62	6.86	87.05	67.34	-167.81	84.36	71.03	13.33	6.327	
2,751.12	2,736.58	2,738.41	2,722.61	6.88	7.12	88.07	73.09	-183.07	91.74	77.90	13.84	6.630	
2,800.00	2,782.52	2,786.69	2,767.98	7.14	7.39	89.15	78.91	-198.52	99.09	84.74	14.35	6.904	
2,900.00	2,876.49	2,885.48	2,860.82	7.70	7.96	90.93	90.82	-230.14	114.23	98.78	15.45	7.392	
3,000.00	2,970.46	2,984.28	2,953.65	8.28	8.55	92.29	102.72	-261.76	129.45	112.85	16.60	7.799	
3,100.00	3,064.43	3,083.07	3,046.49	8.89	9.15	93.36	114.63	-293.38	144.73	126.95	17.78	8.139	
3,200.00	3,158.40	3,181.86	3,139.33	9.51	9.78	94.23	126.54	-325.00	160.05	141.05	19.00	8.425	
3,300.00	3,252.36	3,280.66	3,232.16	10.15	10.41	94.95	138.44	-356.62	175.39	155.15	20.24	8.667	
3,400.00	3,346.33	3,379.45	3,325.00	10.80	11.05	95.55	150.35	-388.24	190.76	169.26	21.50	8.874	
3,500.00	3,440.30	3,478.24	3,417.84	11.46	11.71	96.06	162.26	-419.86	206.15	183.37	22.78	9.051	
3,600.00	3,534.27	3,577.04	3,510.67	12.12	12.37	96.50	174.16	-451.47	221.55	197.48	24.07	9.205	
3,700.00	3,628.24	3,675.83	3,603.51	12.80	13.03	96.88	186.07	-483.09	236.96	211.58	25.37	9.338	
3,800.00	3,722.21	3,774.63	3,696.35	13.47	13.70	97.22	197.97	-514.71	252.38	225.69	26.69	9.456	
3,900.00	3,816.18	3,873.42	3,789.18	14.16	14.38	97.52	209.88	-546.33	267.81	239.79	28.02	9.559	
4,000.00	3,910.15	3,972.21	3,882.02	14.85	15.05	97.78	221.79	-577.95	283.24	253.89	29.35	9.651	
4,100.00	4,004.11	4,071.63	3,975.47	15.54	15.72	98.04	233.74	-609.70	298.66	267.98	30.67	9.736	
4,200.00	4,098.08	4,173.54	4,072.07	16.23	16.27	98.71	245.17	-640.06	313.41	281.52	31.89	9.829	
4,300.00	4,192.05	4,275.38	4,169.70	16.93	16.75	99.94	255.38	-667.16	327.28	294.24	33.04	9.905	
4,318.72	4,209.64	4,294.41	4,188.06	17.06	16.84	100.22	257.15	-671.87	329.80	296.54	33.26	9.917	
4,400.00	4,286.40	4,377.04	4,268.13	17.55	17.18	101.66	264.34	-690.96	340.24	306.16	34.08	9.983	
4,500.00	4,381.84	4,478.69	4,367.38	18.04	17.57	103.31	272.07	-711.48	351.91	316.97	34.94	10.072	
4,600.00	4,478.25	4,580.30	4,467.31	18.48	17.92	104.85	278.55	-728.68	362.24	326.54	35.70	10.148	
4,700.00	4,575.53	4,681.84	4,567.75	18.88	18.21	106.31	283.77	-742.54	371.21	334.86	36.35	10.211	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Weatherford International Ltd.

Anticollision Report

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well BONANZA 1023-5L4AS
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Reference Site:	BONANZA 1023-5K PAD	**MD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	BONANZA 1023-5L4AS	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	BONANZA 1023-5L4AS	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 4-28-10 RHS	**Offset TVD Reference:**	Offset Datum

Offset Design BONANZA 1023-5K PAD - BONANZA 1023-5L1DS - BONANZA 1023-5L1DS - PLAN #1 4-28-10 RHS

Offset Site Error: 0.00 ft

Survey Program: 0-MWD

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4,800.00	4,673.57	4,783.26	4,668.54	19.23	18.45	107.70	287.73	-753.06	378.81	341.90	36.91	10.264	
4,900.00	4,772.22	4,884.52	4,769.51	19.53	18.65	109.04	290.42	-760.22	385.01	347.65	37.36	10.306	
5,000.00	4,871.39	4,985.60	4,870.50	19.79	18.81	110.34	291.86	-764.03	389.82	352.11	37.71	10.338	
5,100.00	4,970.95	5,086.05	4,970.95	20.01	18.93	111.58	292.12	-764.72	393.25	355.28	37.97	10.357	
5,200.00	5,070.77	5,185.87	5,070.77	20.18	19.05	112.42	292.12	-764.72	395.46	357.25	38.21	10.350	
5,300.00	5,170.74	5,285.84	5,170.74	20.31	19.17	112.75	292.12	-764.72	396.38	357.94	38.44	10.312	
5,318.76	5,189.50	5,304.60	5,189.50	20.33	19.20	17.15	292.12	-764.72	396.41	357.92	38.48	10.301	
5,400.00	5,270.74	5,385.84	5,270.74	20.42	19.30	17.15	292.12	-764.72	396.41	357.73	38.68	10.248	
5,500.00	5,370.74	5,485.84	5,370.74	20.54	19.43	17.15	292.12	-764.72	396.41	357.48	38.93	10.183	
5,600.00	5,470.74	5,585.84	5,470.74	20.65	19.56	17.15	292.12	-764.72	396.41	357.22	39.18	10.117	
5,700.00	5,570.74	5,685.84	5,570.74	20.77	19.69	17.15	292.12	-764.72	396.41	356.96	39.44	10.051	
5,800.00	5,670.74	5,785.84	5,670.74	20.90	19.82	17.15	292.12	-764.72	396.41	356.70	39.70	9.985	
5,900.00	5,770.74	5,885.84	5,770.74	21.02	19.95	17.15	292.12	-764.72	396.41	356.44	39.97	9.919	
6,000.00	5,870.74	5,985.84	5,870.74	21.14	20.09	17.15	292.12	-764.72	396.41	356.17	40.23	9.853	
6,100.00	5,970.74	6,085.84	5,970.74	21.27	20.23	17.15	292.12	-764.72	396.41	355.90	40.50	9.787	
6,200.00	6,070.74	6,185.84	6,070.74	21.40	20.37	17.15	292.12	-764.72	396.41	355.63	40.78	9.721	
6,300.00	6,170.74	6,285.84	6,170.74	21.53	20.51	17.15	292.12	-764.72	396.41	355.35	41.05	9.656	
6,400.00	6,270.74	6,385.84	6,270.74	21.66	20.65	17.15	292.12	-764.72	396.41	355.07	41.33	9.590	
6,500.00	6,370.74	6,485.84	6,370.74	21.79	20.79	17.15	292.12	-764.72	396.41	354.79	41.62	9.525	
6,600.00	6,470.74	6,585.84	6,470.74	21.93	20.94	17.15	292.12	-764.72	396.41	354.50	41.90	9.460	
6,700.00	6,570.74	6,685.84	6,570.74	22.06	21.09	17.15	292.12	-764.72	396.41	354.21	42.19	9.396	
6,800.00	6,670.74	6,785.84	6,670.74	22.20	21.23	17.15	292.12	-764.72	396.41	353.92	42.48	9.331	
6,900.00	6,770.74	6,885.84	6,770.74	22.34	21.38	17.15	292.12	-764.72	396.41	353.63	42.78	9.267	
7,000.00	6,870.74	6,985.84	6,870.74	22.48	21.53	17.15	292.12	-764.72	396.41	353.33	43.07	9.203	
7,100.00	6,970.74	7,085.84	6,970.74	22.62	21.69	17.15	292.12	-764.72	396.41	353.03	43.37	9.140	
7,200.00	7,070.74	7,185.84	7,070.74	22.77	21.84	17.15	292.12	-764.72	396.41	352.73	43.67	9.076	
7,300.00	7,170.74	7,285.84	7,170.74	22.91	21.99	17.15	292.12	-764.72	396.41	352.43	43.98	9.013	
7,400.00	7,270.74	7,385.84	7,270.74	23.05	22.15	17.15	292.12	-764.72	396.41	352.12	44.29	8.951	
7,500.00	7,370.74	7,485.84	7,370.74	23.20	22.31	17.15	292.12	-764.72	396.41	351.81	44.60	8.889	
7,600.00	7,470.74	7,585.84	7,470.74	23.35	22.46	17.15	292.12	-764.72	396.41	351.50	44.91	8.827	
7,700.00	7,570.74	7,685.84	7,570.74	23.50	22.62	17.15	292.12	-764.72	396.41	351.18	45.22	8.766	
7,800.00	7,670.74	7,785.84	7,670.74	23.65	22.78	17.15	292.12	-764.72	396.41	350.87	45.54	8.705	
7,900.00	7,770.74	7,885.84	7,770.74	23.80	22.94	17.15	292.12	-764.72	396.41	350.55	45.86	8.645	
8,000.00	7,870.74	7,985.84	7,870.74	23.95	23.11	17.15	292.12	-764.72	396.41	350.23	46.18	8.584	
8,100.00	7,970.74	8,085.84	7,970.74	24.11	23.27	17.15	292.12	-764.72	396.41	349.91	46.50	8.525	
8,200.00	8,070.74	8,185.84	8,070.74	24.26	23.43	17.15	292.12	-764.72	396.41	349.58	46.82	8.466	
8,300.00	8,170.74	8,285.84	8,170.74	24.42	23.60	17.15	292.12	-764.72	396.41	349.25	47.15	8.407	
8,400.00	8,270.74	8,385.84	8,270.74	24.58	23.77	17.15	292.12	-764.72	396.41	348.92	47.48	8.349	
8,500.00	8,370.74	8,485.84	8,370.74	24.73	23.93	17.15	292.12	-764.72	396.41	348.59	47.81	8.291	
8,600.00	8,470.74	8,585.84	8,470.74	24.89	24.10	17.15	292.12	-764.72	396.41	348.26	48.14	8.234	
8,639.26	8,510.00	8,625.10	8,510.00	24.96	24.17	17.15	292.12	-764.72	396.41	348.13	48.28	8.211	

Anadarko Petroleum Corporation

Weatherford International Ltd.

Anticollision Report

Weatherford

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well BONANZA 1023-5L4AS
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Reference Site:	BONANZA 1023-5K PAD	**MD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	BONANZA 1023-5L4AS	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	BONANZA 1023-5L4AS	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 4-28-10 RHS	**Offset TVD Reference:**	Offset Datum

Offset Design BONANZA 1023-5K PAD - BONANZA 1023-5L4DS - BONANZA 1023-5L4DS - PLAN #1 4-28-10 RHS

Offset Site Error: 0.00 ft

Survey Program: 0-MWD

Offset Well Error: 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	88.95	0.36	19.90	19.90				
100.00	100.00	100.00	100.00	0.10	0.10	88.95	0.36	19.90	19.90	19.71	0.19	102.946	
200.00	200.00	200.00	200.00	0.32	0.32	88.95	0.36	19.90	19.90	19.26	0.64	30.956	
300.00	300.00	300.00	300.00	0.55	0.55	88.95	0.36	19.90	19.90	18.81	1.09	18.217	
400.00	399.98	400.61	400.59	0.76	0.76	-173.44	-0.51	18.36	20.11	18.59	1.51	13.286	
500.00	499.92	500.88	500.74	0.97	0.96	-167.42	-2.88	14.16	19.53	17.61	1.92	10.159	
600.00	599.86	600.85	600.57	1.19	1.19	-160.27	-5.46	9.61	18.88	16.52	2.35	8.016	
700.00	699.80	700.82	700.41	1.42	1.42	-152.72	-8.04	5.06	18.53	15.73	2.80	6.610	
754.03	753.79	754.83	754.34	1.54	1.54	-148.57	-9.43	2.60	18.49	15.43	3.05	6.055	CC
800.00	799.74	800.79	800.24	1.64	1.65	-145.03	-10.62	0.50	18.52	15.25	3.27	5.670	
900.00	899.68	900.76	900.07	1.87	1.89	-137.47	-13.19	-4.05	18.84	15.10	3.74	5.039	ES
1,000.00	999.61	1,000.72	999.90	2.10	2.13	-130.27	-15.77	-8.60	19.47	15.25	4.22	4.618	
1,100.00	1,099.55	1,100.69	1,099.73	2.34	2.37	-123.62	-18.35	-13.15	20.39	15.69	4.70	4.341	
1,200.00	1,199.49	1,200.66	1,199.57	2.57	2.62	-117.62	-20.93	-17.71	21.56	16.38	5.18	4.164	
1,300.00	1,299.43	1,300.63	1,299.40	2.80	2.86	-112.29	-23.51	-22.26	22.93	17.28	5.66	4.055	
1,400.00	1,399.37	1,400.60	1,399.23	3.03	3.11	-107.60	-26.08	-26.81	24.49	18.35	6.13	3.993	
1,500.00	1,499.31	1,500.57	1,499.06	3.27	3.35	-103.49	-28.66	-31.37	26.18	19.58	6.61	3.963	
1,600.00	1,599.25	1,600.54	1,598.89	3.50	3.60	-99.89	-31.24	-35.92	28.00	20.92	7.08	3.956	SF
1,700.00	1,699.19	1,700.51	1,698.73	3.73	3.84	-96.75	-33.82	-40.47	29.91	22.36	7.55	3.962	
1,800.00	1,799.13	1,800.48	1,798.56	3.97	4.09	-93.99	-36.40	-45.02	31.90	23.89	8.02	3.979	
1,900.00	1,899.07	1,900.45	1,898.39	4.20	4.33	-91.55	-38.97	-49.58	33.96	25.47	8.49	4.002	
2,000.00	1,999.01	2,000.42	1,998.22	4.43	4.58	-89.40	-41.55	-54.13	36.07	27.12	8.95	4.029	
2,100.00	2,098.94	2,100.38	2,098.05	4.67	4.83	-87.49	-44.13	-58.68	38.23	28.81	9.42	4.058	
2,151.09	2,150.00	2,151.37	2,148.97	4.79	4.95	-86.57	-45.45	-61.02	39.35	29.70	9.66	4.075	
2,200.00	2,198.86	2,200.00	2,197.48	4.91	5.08	-85.55	-47.13	-63.97	40.79	30.89	9.89	4.123	
2,300.00	2,298.47	2,298.60	2,295.49	5.17	5.36	-84.31	-52.38	-73.25	45.26	34.84	10.41	4.346	
2,400.00	2,397.49	2,397.16	2,392.78	5.46	5.69	-84.02	-60.11	-86.91	51.75	40.75	11.00	4.704	
2,500.00	2,495.65	2,495.39	2,488.82	5.79	6.06	-84.39	-70.27	-104.85	60.24	48.56	11.68	5.159	
2,600.00	2,592.69	2,593.25	2,583.30	6.17	6.49	-85.12	-82.79	-126.97	70.70	58.24	12.45	5.678	
2,700.00	2,688.32	2,690.67	2,675.95	6.62	6.98	-86.00	-97.61	-153.15	83.11	69.76	13.35	6.223	
2,751.12	2,736.58	2,740.93	2,723.21	6.88	7.26	-86.63	-106.04	-168.03	90.09	76.22	13.87	6.495	
2,800.00	2,782.52	2,789.32	2,768.69	7.14	7.54	-87.66	-114.19	-182.43	96.80	82.40	14.40	6.722	
2,900.00	2,876.49	2,888.32	2,861.72	7.70	8.12	-89.38	-130.87	-211.89	110.58	95.06	15.52	7.124	
3,000.00	2,970.46	2,987.32	2,954.75	8.28	8.72	-90.73	-147.54	-241.35	124.44	107.75	16.69	7.456	
3,100.00	3,064.43	3,086.32	3,047.78	8.89	9.34	-91.80	-164.22	-270.81	138.36	120.47	17.89	7.733	
3,200.00	3,158.40	3,185.31	3,140.81	9.51	9.97	-92.67	-180.90	-300.27	152.31	133.19	19.12	7.965	
3,300.00	3,252.36	3,284.31	3,233.83	10.15	10.61	-93.40	-197.57	-329.73	166.30	145.92	20.38	8.161	
3,400.00	3,346.33	3,383.31	3,326.86	10.80	11.26	-94.02	-214.25	-359.19	180.30	158.65	21.65	8.327	
3,500.00	3,440.30	3,482.30	3,419.89	11.46	11.92	-94.54	-230.93	-388.65	194.33	171.39	22.94	8.470	
3,600.00	3,534.27	3,581.30	3,512.92	12.12	12.58	-95.00	-247.61	-418.10	208.37	184.12	24.25	8.594	
3,700.00	3,628.24	3,680.30	3,605.95	12.80	13.24	-95.40	-264.28	-447.56	222.41	196.85	25.56	8.701	
3,800.00	3,722.21	3,779.30	3,698.98	13.47	13.91	-95.75	-280.96	-477.02	236.47	209.59	26.89	8.795	
3,900.00	3,816.18	3,878.29	3,792.01	14.16	14.59	-96.06	-297.64	-506.48	250.54	222.32	28.22	8.878	
4,000.00	3,910.15	3,977.29	3,885.04	14.85	15.27	-96.34	-314.31	-535.94	264.61	235.05	29.56	8.952	
4,100.00	4,004.11	4,076.29	3,978.07	15.54	15.95	-96.59	-330.99	-565.40	278.69	247.78	30.91	9.017	
4,200.00	4,098.08	4,175.28	4,071.10	16.23	16.63	-96.82	-347.67	-594.86	292.77	260.51	32.26	9.076	
4,300.00	4,192.05	4,274.28	4,164.13	16.93	17.32	-97.02	-364.35	-624.31	306.86	273.24	33.62	9.128	
4,318.72	4,209.64	4,292.98	4,181.70	17.06	17.44	-97.06	-367.49	-629.87	309.49	275.63	33.87	9.139	
4,400.00	4,286.40	4,375.91	4,260.09	17.55	17.86	-97.46	-380.83	-653.43	320.45	285.67	34.78	9.214	
4,500.00	4,381.84	4,478.20	4,357.80	18.04	18.34	-97.90	-395.73	-679.76	332.69	296.94	35.75	9.307	
4,600.00	4,478.25	4,580.73	4,456.75	18.48	18.77	-98.30	-408.93	-703.08	343.54	306.90	36.63	9.377	
4,700.00	4,575.53	4,683.46	4,556.81	18.88	19.17	-98.65	-420.40	-723.34	352.97	315.53	37.43	9.429	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Weatherford International Ltd.

Anticollision Report

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well BONANZA 1023-5L4AS
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Reference Site:	BONANZA 1023-5K PAD	**MD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	BONANZA 1023-5L4AS	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	BONANZA 1023-5L4AS	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 4-28-10 RHS	**Offset TVD Reference:**	Offset Datum

Offset Design BONANZA 1023-5K PAD - BONANZA 1023-5L4DS - BONANZA 1023-5L4DS - PLAN #1 4-28-10 RHS — **Offset Site Error:** 0.00 ft

Survey Program: 0-MWD — **Offset Well Error:** 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4,800.00	4,673.57	4,786.37	4,657.81	19.23	19.52	-98.97	-430.12	-740.49	360.97	322.83	38.14	9.463	
4,900.00	4,772.22	4,889.42	4,759.59	19.53	19.82	-99.26	-438.04	-754.50	367.54	328.78	38.76	9.482	
5,000.00	4,871.39	4,992.58	4,861.99	19.79	20.08	-99.52	-444.17	-765.32	372.65	333.36	39.29	9.486	
5,100.00	4,970.95	5,095.81	4,964.84	20.01	20.29	-99.76	-448.48	-772.92	376.31	336.59	39.72	9.475	
5,200.00	5,070.77	5,199.07	5,067.97	20.18	20.45	-99.97	-450.95	-777.30	378.50	338.44	40.06	9.449	
5,300.00	5,170.74	5,301.84	5,170.74	20.31	20.58	-100.15	-451.62	-778.48	379.23	338.91	40.32	9.406	
5,318.76	5,189.50	5,320.61	5,189.50	20.33	20.60	164.22	-451.62	-778.48	379.24	338.88	40.36	9.397	
5,400.00	5,270.74	5,401.84	5,270.74	20.42	20.68	164.22	-451.62	-778.48	379.24	338.70	40.54	9.355	
5,500.00	5,370.74	5,501.84	5,370.74	20.54	20.79	164.22	-451.62	-778.48	379.24	338.47	40.77	9.302	
5,600.00	5,470.74	5,601.84	5,470.74	20.65	20.90	164.22	-451.62	-778.48	379.24	338.24	41.00	9.250	
5,700.00	5,570.74	5,701.84	5,570.74	20.77	21.02	164.22	-451.62	-778.48	379.24	338.00	41.24	9.197	
5,800.00	5,670.74	5,801.84	5,670.74	20.90	21.13	164.22	-451.62	-778.48	379.24	337.76	41.48	9.143	
5,900.00	5,770.74	5,901.84	5,770.74	21.02	21.25	164.22	-451.62	-778.48	379.24	337.52	41.72	9.090	
6,000.00	5,870.74	6,001.84	5,870.74	21.14	21.37	164.22	-451.62	-778.48	379.24	337.27	41.97	9.037	
6,100.00	5,970.74	6,101.84	5,970.74	21.27	21.49	164.22	-451.62	-778.48	379.24	337.02	42.22	8.983	
6,200.00	6,070.74	6,201.84	6,070.74	21.40	21.61	164.22	-451.62	-778.48	379.24	336.77	42.47	8.930	
6,300.00	6,170.74	6,301.84	6,170.74	21.53	21.73	164.22	-451.62	-778.48	379.24	336.51	42.73	8.876	
6,400.00	6,270.74	6,401.84	6,270.74	21.66	21.86	164.22	-451.62	-778.48	379.24	336.25	42.99	8.822	
6,500.00	6,370.74	6,501.84	6,370.74	21.79	21.98	164.22	-451.62	-778.48	379.24	335.99	43.25	8.769	
6,600.00	6,470.74	6,601.84	6,470.74	21.93	22.11	164.22	-451.62	-778.48	379.24	335.72	43.52	8.715	
6,700.00	6,570.74	6,701.84	6,570.74	22.06	22.24	164.22	-451.62	-778.48	379.24	335.46	43.78	8.662	
6,800.00	6,670.74	6,801.84	6,670.74	22.20	22.37	164.22	-451.62	-778.48	379.24	335.18	44.06	8.608	
6,900.00	6,770.74	6,901.84	6,770.74	22.34	22.50	164.22	-451.62	-778.48	379.24	334.91	44.33	8.555	
7,000.00	6,870.74	7,001.84	6,870.74	22.48	22.64	164.22	-451.62	-778.48	379.24	334.63	44.61	8.502	
7,100.00	6,970.74	7,101.84	6,970.74	22.62	22.77	164.22	-451.62	-778.48	379.24	334.35	44.89	8.448	
7,200.00	7,070.74	7,201.84	7,070.74	22.77	22.91	164.22	-451.62	-778.48	379.24	334.07	45.17	8.395	
7,300.00	7,170.74	7,301.84	7,170.74	22.91	23.05	164.22	-451.62	-778.48	379.24	333.78	45.46	8.343	
7,400.00	7,270.74	7,401.84	7,270.74	23.05	23.19	164.22	-451.62	-778.48	379.24	333.49	45.75	8.290	
7,500.00	7,370.74	7,501.84	7,370.74	23.20	23.33	164.22	-451.62	-778.48	379.24	333.20	46.04	8.238	
7,600.00	7,470.74	7,601.84	7,470.74	23.35	23.47	164.22	-451.62	-778.48	379.24	332.91	46.33	8.186	
7,700.00	7,570.74	7,701.84	7,570.74	23.50	23.61	164.22	-451.62	-778.48	379.24	332.61	46.63	8.134	
7,800.00	7,670.74	7,801.84	7,670.74	23.65	23.76	164.22	-451.62	-778.48	379.24	332.31	46.92	8.082	
7,900.00	7,770.74	7,901.84	7,770.74	23.80	23.90	164.22	-451.62	-778.48	379.24	332.01	47.23	8.030	
8,000.00	7,870.74	8,001.84	7,870.74	23.95	24.05	164.22	-451.62	-778.48	379.24	331.71	47.53	7.979	
8,100.00	7,970.74	8,101.84	7,970.74	24.11	24.20	164.22	-451.62	-778.48	379.24	331.40	47.83	7.928	
8,200.00	8,070.74	8,201.84	8,070.74	24.26	24.35	164.22	-451.62	-778.48	379.24	331.10	48.14	7.877	
8,300.00	8,170.74	8,301.84	8,170.74	24.42	24.50	164.22	-451.62	-778.48	379.24	330.79	48.45	7.827	
8,400.00	8,270.74	8,401.84	8,270.74	24.58	24.65	164.22	-451.62	-778.48	379.24	330.48	48.76	7.777	
8,500.00	8,370.74	8,501.84	8,370.74	24.73	24.80	164.22	-451.62	-778.48	379.24	330.16	49.08	7.727	
8,600.00	8,470.74	8,601.84	8,470.74	24.89	24.96	164.22	-451.62	-778.48	379.24	329.84	49.39	7.678	
8,615.09	8,485.83	8,616.94	8,485.83	24.92	24.98	164.22	-451.62	-778.48	379.24	329.80	49.44	7.670	
8,639.26	8,510.00	8,623.11	8,492.00	24.96	24.99	164.22	-451.62	-778.48	379.67	330.17	49.49	7.671	

Anadarko Petroleum Corporation

Weatherford International Ltd.

Anticollision Report

Weatherford

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well BONANZA 1023-5L4AS
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Reference Site:	BONANZA 1023-5K PAD	**MD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	BONANZA 1023-5L4AS	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	BONANZA 1023-5L4AS	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 4-28-10 RHS	**Offset TVD Reference:**	Offset Datum

Offset Design BONANZA 1023-5K PAD - BONANZA 1023-5O2AS - BONANZA 1023-5O2AS - PLAN #1 4-28-10 RHS — **Offset Site Error:** 0.00 ft

Survey Program: 0-MWD — **Offset Well Error:** 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
0.00	0.00	0.00	0.00	0.00	0.00	88.96	1.09	59.97	59.98				
100.00	100.00	100.00	100.00	0.10	0.10	88.96	1.09	59.97	59.98	59.78	0.19	310.286	
200.00	200.00	200.00	200.00	0.32	0.32	88.96	1.09	59.97	59.98	59.34	0.64	93.303	
300.00	300.00	300.00	300.00	0.55	0.55	88.96	1.09	59.97	59.98	58.89	1.09	54.907	CC, ES
400.00	399.98	398.15	398.13	0.76	0.75	-174.74	0.23	61.41	63.17	61.66	1.52	41.691	
500.00	499.92	496.83	496.70	0.97	0.95	-173.01	-2.20	65.43	70.73	68.80	1.93	36.651	
600.00	599.86	596.49	596.22	1.19	1.17	-171.43	-4.89	69.90	78.77	76.42	2.35	33.489	
700.00	699.80	696.15	695.74	1.42	1.40	-170.15	-7.58	74.37	86.85	84.07	2.78	31.186	
800.00	799.74	795.80	795.26	1.64	1.64	-169.08	-10.27	78.83	94.97	91.75	3.22	29.452	
900.00	899.68	895.46	894.78	1.87	1.88	-168.18	-12.97	83.30	103.12	99.45	3.67	28.110	
1,000.00	999.61	995.11	994.30	2.10	2.11	-167.42	-15.66	87.77	111.29	107.17	4.11	27.044	
1,100.00	1,099.55	1,094.77	1,093.82	2.34	2.35	-166.76	-18.35	92.23	119.47	114.91	4.56	26.180	
1,200.00	1,199.49	1,194.42	1,193.34	2.57	2.60	-166.18	-21.04	96.70	127.67	122.66	5.01	25.465	
1,300.00	1,299.43	1,294.08	1,292.85	2.80	2.84	-165.67	-23.73	101.17	135.88	130.42	5.46	24.866	
1,400.00	1,399.37	1,393.74	1,392.37	3.03	3.08	-165.23	-26.42	105.64	144.10	138.18	5.92	24.355	
1,500.00	1,499.31	1,493.39	1,491.89	3.27	3.32	-164.82	-29.12	110.10	152.33	145.96	6.37	23.917	
1,600.00	1,599.25	1,593.05	1,591.41	3.50	3.57	-164.47	-31.81	114.57	160.56	153.74	6.82	23.535	
1,700.00	1,699.19	1,692.70	1,690.93	3.73	3.81	-164.14	-34.50	119.04	168.80	161.52	7.28	23.201	
1,800.00	1,799.13	1,792.36	1,790.45	3.97	4.05	-163.85	-37.19	123.51	177.05	169.32	7.73	22.905	
1,900.00	1,899.07	1,892.01	1,889.97	4.20	4.30	-163.58	-39.88	127.97	185.29	177.11	8.18	22.642	
2,000.00	1,999.01	1,991.67	1,989.49	4.43	4.54	-163.33	-42.57	132.44	193.55	184.91	8.64	22.406	
2,100.00	2,098.94	2,091.33	2,089.01	4.67	4.79	-163.11	-45.27	136.91	201.80	192.71	9.09	22.194	
2,151.09	2,150.00	2,140.40	2,138.01	4.79	4.91	-163.00	-46.63	139.18	206.11	196.79	9.32	22.111	SF
2,200.00	2,198.86	2,184.45	2,181.94	4.91	5.02	-162.82	-48.30	141.95	211.71	202.18	9.53	22.219	
2,300.00	2,298.47	2,273.08	2,270.04	5.17	5.28	-162.41	-53.23	150.13	230.07	220.13	9.95	23.132	
2,400.00	2,397.49	2,358.89	2,354.84	5.46	5.56	-161.98	-60.02	161.39	257.50	247.15	10.35	24.878	
2,500.00	2,495.65	2,440.96	2,435.31	5.79	5.85	-161.53	-68.33	175.19	293.58	282.84	10.74	27.345	
2,600.00	2,592.69	2,518.52	2,510.65	6.17	6.17	-161.05	-77.83	190.95	337.82	326.72	11.10	30.433	
2,700.00	2,688.32	2,590.99	2,580.31	6.62	6.50	-160.54	-88.12	208.03	389.65	378.21	11.44	34.052	
2,751.12	2,736.58	2,625.93	2,613.62	6.88	6.67	-160.25	-93.57	217.07	418.89	407.27	11.61	36.073	
2,800.00	2,782.52	2,658.26	2,644.26	7.14	6.84	-160.31	-98.89	225.90	448.01	436.16	11.84	37.825	
2,900.00	2,876.49	2,733.75	2,715.41	7.70	7.25	-160.37	-111.92	247.52	508.80	496.45	12.35	41.203	
3,000.00	2,970.46	2,813.08	2,790.14	8.28	7.71	-160.41	-125.65	270.31	569.69	556.83	12.86	44.298	
3,100.00	3,064.43	2,892.40	2,864.87	8.89	8.18	-160.45	-139.38	293.10	630.58	617.19	13.39	47.109	
3,200.00	3,158.40	2,971.73	2,939.60	9.51	8.66	-160.48	-153.11	315.89	691.46	677.54	13.92	49.666	
3,300.00	3,252.36	3,051.06	3,014.33	10.15	9.15	-160.50	-166.85	338.67	752.35	737.88	14.47	52.000	
3,400.00	3,346.33	3,130.38	3,089.06	10.80	9.65	-160.52	-180.58	361.46	813.24	798.22	15.02	54.136	
3,500.00	3,440.30	3,209.71	3,163.79	11.46	10.16	-160.54	-194.31	384.25	874.13	858.54	15.58	56.092	
3,600.00	3,534.27	3,289.04	3,238.53	12.12	10.67	-160.56	-208.04	407.04	935.01	918.86	16.15	57.886	
3,700.00	3,628.24	3,368.36	3,313.26	12.80	11.19	-160.57	-221.77	429.83	995.90	979.17	16.73	59.535	
3,800.00	3,722.21	3,447.69	3,387.99	13.47	11.71	-160.58	-235.51	452.62	1,056.79	1,039.48	17.31	61.056	
3,900.00	3,816.18	3,527.02	3,462.72	14.16	12.24	-160.60	-249.24	475.41	1,117.68	1,099.78	17.89	62.461	
4,000.00	3,910.15	3,606.34	3,537.45	14.85	12.76	-160.61	-262.97	498.19	1,178.56	1,160.08	18.48	63.762	
4,100.00	4,004.11	3,685.67	3,612.18	15.54	13.30	-160.61	-276.70	520.98	1,239.45	1,220.37	19.08	64.967	
4,200.00	4,098.08	3,764.99	3,686.91	16.23	13.83	-160.62	-290.43	543.77	1,300.34	1,280.66	19.68	66.086	
4,300.00	4,192.05	3,844.32	3,761.65	16.93	14.37	-160.63	-304.17	566.56	1,361.23	1,340.95	20.28	67.128	
4,318.72	4,209.64	3,859.17	3,775.64	17.06	14.47	-160.63	-306.74	570.83	1,372.63	1,352.23	20.39	67.315	
4,400.00	4,286.40	3,924.30	3,836.99	17.55	14.91	-161.02	-318.01	589.54	1,421.24	1,400.26	20.98	67.735	
4,500.00	4,381.84	4,006.17	3,914.12	18.04	15.47	-161.40	-332.18	613.06	1,478.64	1,456.97	21.67	68.247	
4,600.00	4,478.25	4,089.87	3,992.98	18.48	16.05	-161.70	-346.67	637.10	1,533.29	1,510.96	22.34	68.639	
4,700.00	4,575.53	4,175.30	4,073.45	18.88	16.63	-161.93	-361.46	661.64	1,585.15	1,562.16	23.00	68.929	
4,800.00	4,673.57	4,262.35	4,155.46	19.23	17.23	-162.10	-376.53	686.65	1,634.16	1,610.52	23.64	69.137	

CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Anadarko Petroleum Corporation

Weatherford International Ltd.

Anticollision Report

Weatherford

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well BONANZA 1023-5L4AS
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Reference Site:	BONANZA 1023-5K PAD	**MD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	BONANZA 1023-5L4AS	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	BONANZA 1023-5L4AS	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 4-28-10 RHS	**Offset TVD Reference:**	Offset Datum

Offset Design BONANZA 1023-5K PAD - BONANZA 1023-5O2AS - BONANZA 1023-5O2AS - PLAN #1 4-28-10 RHS — **Offset Site Error:** 0.00 ft

Survey Program: 0-MWD — **Offset Well Error:** 0.00 ft

Reference Measured Depth (ft)	Reference Vertical Depth (ft)	Offset Measured Depth (ft)	Offset Vertical Depth (ft)	Semi Major Axis Reference (ft)	Semi Major Axis Offset (ft)	Highside Toolface (°)	Offset Wellbore Centre +N/-S (ft)	Offset Wellbore Centre +E/-W (ft)	Distance Between Centres (ft)	Distance Between Ellipses (ft)	Minimum Separation (ft)	Separation Factor	Warning
4,900.00	4,772.22	4,350.91	4,238.89	19.53	17.84	-162.20	-391.86	712.09	1,680.25	1,656.00	24.25	69.275	
5,000.00	4,871.39	4,440.88	4,323.65	19.79	18.47	-162.25	-407.44	737.94	1,723.40	1,698.55	24.85	69.355	
5,100.00	4,970.95	4,532.15	4,409.63	20.01	19.10	-162.25	-423.23	764.16	1,763.55	1,738.13	25.42	69.387	
5,200.00	5,070.77	4,624.61	4,496.73	20.18	19.74	-162.20	-439.24	790.72	1,800.67	1,774.72	25.95	69.379	
5,300.00	5,170.74	4,718.14	4,584.85	20.31	20.39	-162.10	-455.43	817.59	1,834.73	1,808.27	26.46	69.337	
5,318.76	5,189.50	4,735.80	4,601.49	20.33	20.52	102.31	-458.49	822.66	1,840.78	1,814.23	26.55	69.322	
5,400.00	5,270.74	4,812.33	4,673.58	20.42	21.05	102.57	-471.74	844.64	1,866.75	1,839.79	26.96	69.250	
5,500.00	5,370.74	4,906.54	4,762.33	20.54	21.71	102.89	-488.04	871.71	1,898.76	1,871.31	27.45	69.168	
5,600.00	5,470.74	5,000.74	4,851.08	20.65	22.37	103.20	-504.35	898.77	1,930.83	1,902.89	27.95	69.093	
5,700.00	5,570.74	5,094.95	4,939.83	20.77	23.03	103.50	-520.66	925.83	1,962.95	1,934.51	28.44	69.022	
5,800.00	5,670.74	5,189.16	5,028.58	20.90	23.69	103.79	-536.97	952.90	1,995.11	1,966.18	28.93	68.957	
5,900.00	5,770.74	5,283.37	5,117.34	21.02	24.35	104.07	-553.28	979.96	2,027.32	1,997.90	29.43	68.897	
6,000.00	5,870.74	5,377.57	5,206.09	21.14	25.01	104.34	-569.58	1,007.03	2,059.57	2,029.65	29.92	68.840	
6,100.00	5,970.74	5,471.78	5,294.84	21.27	25.67	104.61	-585.89	1,034.09	2,091.86	2,061.45	30.41	68.788	
6,200.00	6,070.74	5,789.76	5,599.55	21.40	27.19	105.32	-632.50	1,111.44	2,119.46	2,088.06	31.40	67.505	
6,300.00	6,170.74	6,137.41	5,941.86	21.53	28.26	105.75	-663.19	1,162.36	2,136.00	2,103.70	32.30	66.140	
6,400.00	6,270.74	6,466.94	6,270.74	21.66	28.77	105.88	-672.33	1,177.53	2,140.79	2,107.79	33.01	64.861	
6,500.00	6,370.74	6,566.94	6,370.74	21.79	28.86	105.88	-672.33	1,177.53	2,140.79	2,107.46	33.33	64.231	
6,600.00	6,470.74	6,666.94	6,470.74	21.93	28.96	105.88	-672.33	1,177.53	2,140.79	2,107.14	33.65	63.613	
6,700.00	6,570.74	6,766.94	6,570.74	22.06	29.06	105.88	-672.33	1,177.53	2,140.79	2,106.81	33.98	63.001	
6,800.00	6,670.74	6,866.94	6,670.74	22.20	29.16	105.88	-672.33	1,177.53	2,140.79	2,106.48	34.31	62.396	
6,900.00	6,770.74	6,966.94	6,770.74	22.34	29.26	105.88	-672.33	1,177.53	2,140.79	2,106.15	34.64	61.798	
7,000.00	6,870.74	7,066.94	6,870.74	22.48	29.36	105.88	-672.33	1,177.53	2,140.79	2,105.82	34.98	61.206	
7,100.00	6,970.74	7,166.94	6,970.74	22.62	29.46	105.88	-672.33	1,177.53	2,140.79	2,105.48	35.31	60.622	
7,200.00	7,070.74	7,266.94	7,070.74	22.77	29.56	105.88	-672.33	1,177.53	2,140.79	2,105.14	35.65	60.044	
7,300.00	7,170.74	7,366.94	7,170.74	22.91	29.67	105.88	-672.33	1,177.53	2,140.79	2,104.80	36.00	59.474	
7,400.00	7,270.74	7,466.94	7,270.74	23.05	29.77	105.88	-672.33	1,177.53	2,140.79	2,104.45	36.34	58.910	
7,500.00	7,370.74	7,566.94	7,370.74	23.20	29.88	105.88	-672.33	1,177.53	2,140.79	2,104.11	36.69	58.354	
7,600.00	7,470.74	7,666.94	7,470.74	23.35	29.99	105.88	-672.33	1,177.53	2,140.79	2,103.76	37.04	57.804	
7,700.00	7,570.74	7,766.94	7,570.74	23.50	30.10	105.88	-672.33	1,177.53	2,140.79	2,103.41	37.39	57.262	
7,800.00	7,670.74	7,866.94	7,670.74	23.65	30.21	105.88	-672.33	1,177.53	2,140.79	2,103.05	37.74	56.726	
7,900.00	7,770.74	7,966.94	7,770.74	23.80	30.33	105.88	-672.33	1,177.53	2,140.79	2,102.70	38.09	56.197	
8,000.00	7,870.74	8,066.94	7,870.74	23.95	30.44	105.88	-672.33	1,177.53	2,140.79	2,102.34	38.45	55.676	
8,100.00	7,970.74	8,166.94	7,970.74	24.11	30.56	105.88	-672.33	1,177.53	2,140.79	2,101.98	38.81	55.161	
8,200.00	8,070.74	8,266.94	8,070.74	24.26	30.67	105.88	-672.33	1,177.53	2,140.79	2,101.62	39.17	54.653	
8,300.00	8,170.74	8,366.94	8,170.74	24.42	30.79	105.88	-672.33	1,177.53	2,140.79	2,101.26	39.53	54.152	
8,400.00	8,270.74	8,466.94	8,270.74	24.58	30.91	105.88	-672.33	1,177.53	2,140.79	2,100.90	39.90	53.658	
8,500.00	8,370.74	8,566.94	8,370.74	24.73	31.03	105.88	-672.33	1,177.53	2,140.79	2,100.53	40.26	53.170	
8,537.42	8,408.15	8,604.36	8,408.15	24.79	31.08	105.88	-672.33	1,177.53	2,140.79	2,100.39	40.40	52.989	
8,600.00	8,470.74	8,620.20	8,424.00	24.89	31.09	105.88	-672.33	1,177.53	2,141.30	2,100.75	40.55	52.807	
8,639.26	8,510.00	8,620.20	8,424.00	24.96	31.09	105.88	-672.33	1,177.53	2,142.52	2,101.89	40.63	52.737	

Anadarko Petroleum Corporation

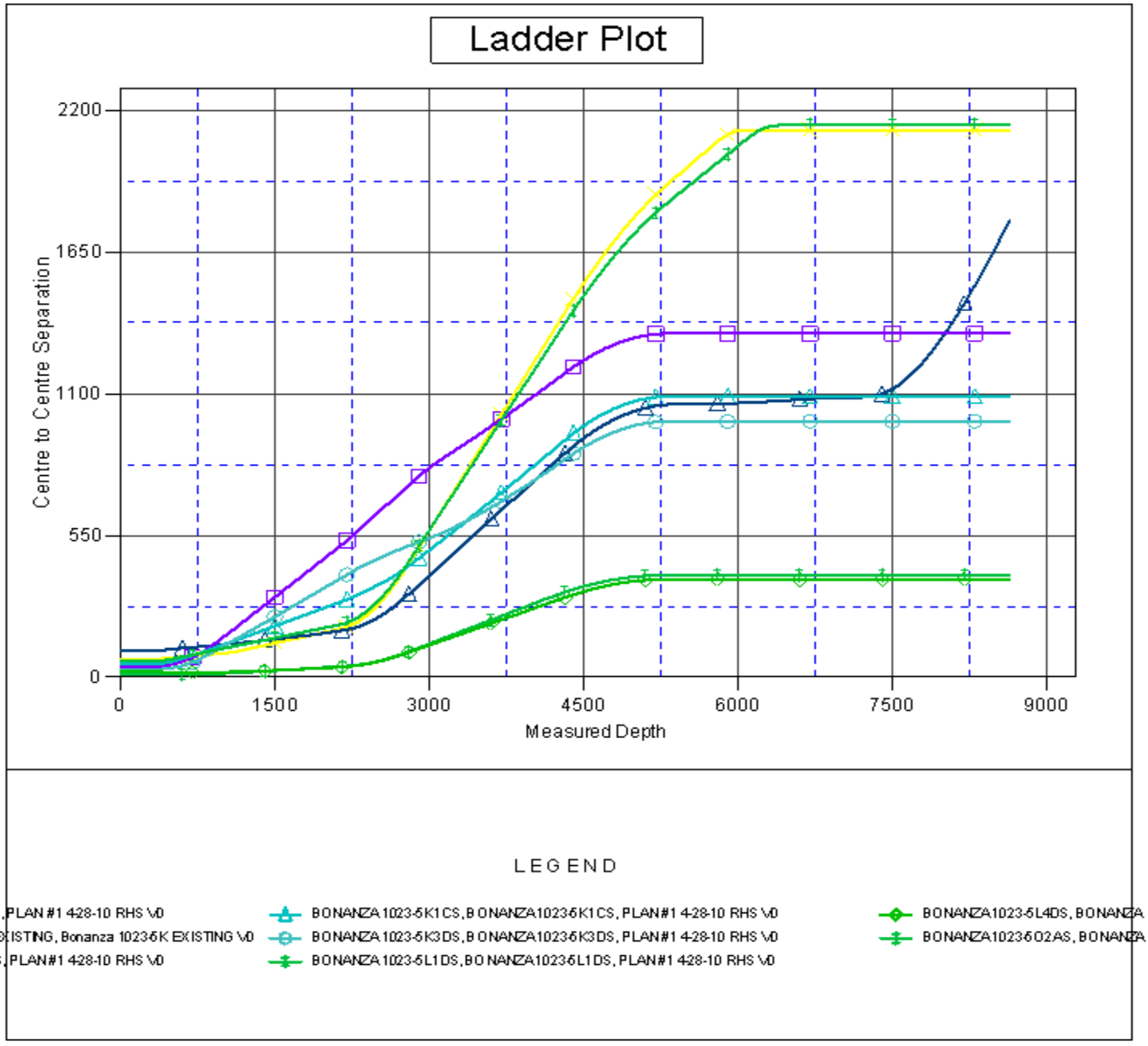
Weatherford International Ltd.

Anticollision Report

Weatherford

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well BONANZA 1023-5L4AS
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Reference Site:	BONANZA 1023-5K PAD	**MD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	BONANZA 1023-5L4AS	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	BONANZA 1023-5L4AS	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 4-28-10 RHS	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to WELL @ 5341.00ft (Original Well Ele\Coordinates are relative to: BONANZA 1023-5L4AS
Offset Depths are relative to Offset Datum Coordinate System is Universal Transverse Mercator (US Survey Feet), Zone 12N
Central Meridian is 111° 0' 0.000 W ° Grid Convergence at Surface is: 1.06°



Anadarko Petroleum Corporation

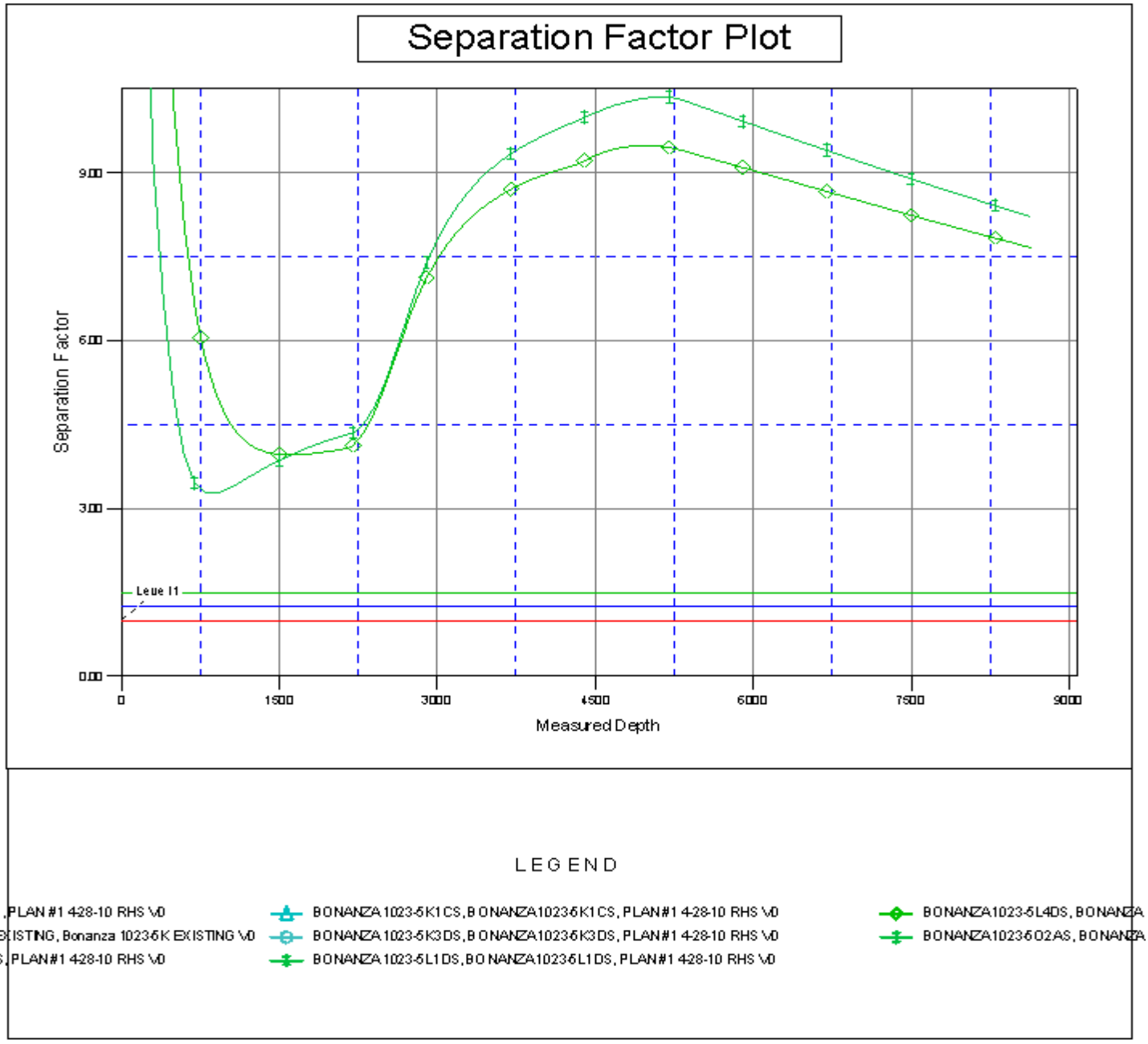
Weatherford International Ltd.

Anticollision Report

Weatherford

Company:	ANADARKO PETROLEUM CORP.	**Local Co-ordinate Reference:**	Well BONANZA 1023-5L4AS
Project:	UINTAH COUNTY, UTAH (nad 27)	**TVD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Reference Site:	BONANZA 1023-5K PAD	**MD Reference:**	WELL @ 5341.00ft (Original Well Elev)
Site Error:	0.00ft	**North Reference:**	True
Reference Well:	BONANZA 1023-5L4AS	**Survey Calculation Method:**	Minimum Curvature
Well Error:	0.00ft	**Output errors are at**	2.00 sigma
Reference Wellbore	BONANZA 1023-5L4AS	**Database:**	EDM 2003.21 Single User Db
Reference Design:	PLAN #1 4-28-10 RHS	**Offset TVD Reference:**	Offset Datum

Reference Depths are relative to WELL @ 5341.00ft (Original Well Ele\Coordinates are relative to: BONANZA 1023-5L4AS
Offset Depths are relative to Offset Datum
Coordinate System is Universal Transverse Mercator (US Survey Feet), Zone 12N
Central Meridian is 111° 0' 0.000 W °
Grid Convergence at Surface is: 1.06°



CC - Min centre to center distance or covergent point, SF - min separation factor, ES - min ellipse separation

Kerr-McGee Oil & Gas Onshore. L.P.

Bonanza 1023-5K Pad

API #	**BONANZA 1023-5J2DS**			
	Surface:	1951 FSL / 2035 FWL	NESW	Lot
	BHL:	2022 FSL / 2070 FEL	NWSE	Lot
API #	**BONANZA 1023-5K1BS**			
	Surface:	1951 FSL / 2005 FWL	NESW	Lot
	BHL:	2557 FSL / 2222 FWL	NESW	Lot
API #	**BONANZA 1023-5K1CS**			
	Surface:	1951 FSL / 2015 FWL	NESW	Lot
	BHL:	2180 FSL / 2125 FWL	NESW	Lot
API #	**BONANZA 1023-5K3DS**			
	Surface:	1951 FSL / 1995 FWL	NESW	Lot
	BHL:	1470 FSL / 1994 FWL	NESW	Lot
API #	**BONANZA 1023-5L1DS**			
	Surface:	1951 FSL / 1975 FWL	NESW	Lot
	BHL:	2244 FSL / 1200 FWL	NWSW	Lot
API #	**BONANZA 1023-5L4AS**			
	Surface:	1951 FSL / 1965 FWL	NESW	Lot
	BHL:	1865 FSL / 1083 FWL	NWSW	Lot
API #	**BONANZA 1023-5L4DS**			
	Surface:	1951 FSL / 1985 FWL	NESW	Lot
	BHL:	1500 FSL / 1186 FWL	NWSW	Lot
API #	**BONANZA 1023-5O2AS**			
	Surface:	1951 FSL / 2025 FWL	NESW	Lot
	BHL:	1275 FSL / 2125 FEL	SWSE	Lot

This Surface Use Plan of Operations (SUPO) or 13-point plan provides site-specific information for the above-referenced wells.

In accordance with Utah Oil & Gas Conservation Rule R649-3-11 pertaining to Directional Drilling, these wells will be directionally drilled. Refer to Topo Map A for directions to the location and Topo Maps A and B for location of access roads within a 2-mile radius.

An on-site meeting was held on May 19, 2010. Present were:

- David Gordon, NRS; Kevin Sadiler, NRS; Ryan Angus, PET Engineer; Steve Strong, Reclamation; Dan Emmett, Wildlife Biologist - BLM;
- John Slaugh, Mitch Batty, Brian Venn, Jacob Dunham, Jake Edmunds, B.J. Reenders - 609 & Timberline Engineering & Land Surveying, Inc.
- Danielle Piernot and Kathy Schneebeck Dulnoan, Regulatory; Brad Burman, Completions; Clay Einerson, Construction; Grizz Oleen, Environmental; Charles Chase, Reclamation; Lovell Young, Drilling, Roger Parry and Ramey Hoopes, Construction

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A. Existing Roads:

Existing roads consist of county and improved/unimproved access roads (two-tracks). In accordance with Onshore Order #1, Kerr-McGee will, in accordance with BMPs, improve or maintain existing roads in a condition that is the same as or better than before operations began. New or reconstructed proposed access roads are discussed in Section B.

The existing roads will be maintained in a safe and usable condition. Maintenance for existing roads will continue until final abandonment and reclamation of well pads and/or other facilities, as applicable. Road maintenance will include, but is not limited to, blading, ditching, and/or culvert installation and cleanout. To ensure safe operating conditions, gravel surfacing will be performed where excessive rutting or erosion may occur. Dust control will be performed as necessary to ensure safe operating conditions.

Roads, gathering lines and electrical distribution lines will occupy common disturbance corridors where possible. Where available, roadways will be used as the staging area and working space for installation of gathering lines. All disturbances located in the same corridor will overlap each other to the maximum extent possible, while maintaining safe and sound construction and installation practices. Unless otherwise approved or requested in site specific documents, in no case will the maximum disturbance widths of the access road and utility corridors exceed the widths specified in Part D of this document.

All access roads leading to the pad are exsisting and on lease; therefore do not require a ROW.

** Please refer to Topo B

(0.3 miles) – Section 5 T10S R23E (NE/4 SW/4) – On-lease UTU33433, from existing pad traveling southeast onto existing road to the county road intersection.

B. New or Reconstructed Access Roads:

All new or reconstructed roads will be located, designed, and maintained to meet the standards of the BLM. BMPs. Described in the BLM's Surface Operating Standards for Oil and Gas Exploration and Development, 4th Edition (Gold Book) (USDI and USDA, 2007) and/or BLM Manual Section 9113 (1985) will be considered in consultation with the BLM in the design, construction, improvement and maintenance of all new or reconstructed roads. If a new road would cross a water of the United States, Kerr-McGee will adhere to the requirements of applicable Nationwide Permits of the Department of Army Corps of Engineers.

Each new well pad or pad expansion may require construction of a new access road and/or de-commissioning of an older road. Plans, routes, and distances for new roads and road improvements are provided in design packages, exhibits and maps for a project. Project-specific maps are submitted to depict the locations of existing, proposed, and/or decommissioned and include the locations for supporting structures, including, but not limited to, culverts, bridges, low water crossings, range infrastructure, and haul routes, as per OSO 1. Designs for cuts and fills, including spoils source and storage areas, are provided with the road designs, as necessary.

Where safety objectives can be met. As applicable, Kerr-McGee may use unimproved and/or two-track roads for lease operations, to lessen total disturbance.

Road designs will be based on the road safety requirements, traffic characteristics, environmental conditions, and the vehicles the road is intended to carry. Generally, newly constructed unpaved lease roads will be crowned and ditched with the running surfaces of the roads approximately 12-18 feet wide and a total road corridor width not to exceed 45 feet, except where noted in the road design for a specific project. Maximum grade will generally not exceed 8%. Borrow ditches will be back sloped 3:1 or less. Construction BMPs will be employed to control onsite and offsite erosion.

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Where topography would direct storm water runoff to an access road or well pad, drainage ditches or other common drainage control facilities, such as V- or wing-ditches, will be constructed to divert surface water runoff. Drainage features, including culverts, will be constructed or installed prior to commencing other operations, including drilling or facilities placement. Riprap will be placed at the inlet and outlet at the culvert(s), as necessary.

Prior to construction, new access road(s) will be staked according to the requirements of OSO 1. Construction activity will not be conducted using frozen or saturated materials or during periods when significant watershed damage (e.g. rutting, extensive sheet soil erosion, formation of rills/gullies, etc.) is likely to occur. Vegetative debris will not be placed in or under fill embankments.

New road maintenance will include, but is not limited to, blading, ditching, culvert installation and cleanout, gravel surfacing where excessive rutting or erosion may occur and dust control, as necessary to ensure safe operating conditions. All vehicular traffic, personnel movement, construction/restoration operations will be confined to the approved area and to existing roadways and/or access routes.

Snow removal will be conducted on an as-needed basis to accommodate safe travel. Snow removal will occur as necessary throughout the year, as will necessary drainage ditch construction. Removed snow may be stored on permitted well pads to reduce hauling distances and/or at the aerial extent of approved disturbance boundaries to facilitate snow removal for the remainder of the season.

If a county road crossing or encroachment permit is needed, it will be obtained prior to construction.

There are no new or reconstructed access roads for the proposed well pad.

** Please refer to Topo B2

C. Location of Existing Wells:

A) Refer to Topo Map C.

D. Location of Existing and/or Proposed Facilities:

This pad will expand the existing pad for the Bonanza 1023-5K, which is a producing gas well according to Utah Division of Oil, Gas and Mining (UDOGM) records on May 25, 2011. Gathering (pipeline) infrastructure will be utilized to collect and transport gas and fluids from the wells which are owned and operated by Kerr McGee Oil and Gas Onshore LP (Kerr-McGee).

Should the well(s) prove productive, production facilities will be installed on the disturbed portion of each well pad. A berm will be constructed completely around production components (typically excluding dehy's and/or separators) that contain fluids (i.e. production tanks, produced liquids tanks). The berms will generally be constructed of compacted subsoil or corrugated metal, and will hold the capacity of the largest tank and have sufficient freeboard to accomodate a 25 year rainfall event. This includes pumping units. Aboveground structures constructed or installed onsite for 6 months or longer, will be painted a flat, non-reflective, earth-tone color chosen at the onsite in coordination with the BLM (typically Shadow Gray). A production facility layout is provided as part of a project-specific APD, ROW or NOS submission.

GAS GATHERING

Please refer to Exhibit B and Topo D- Pad and Pipeline Detail.

The gas gathering pipeline material: Steel line pipe. Surface = Bare pipe. Buried = Coated with fusion bonded epoxy coating (or equivalent). The total gas gathering pipeline distance from the meter to the tie in point is ±4,300' and the individual segments are broken up as follows:

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The following segments are "onlease", no ROW needed.

±570’ (0.12 miles) – Section 5 T10S R23E (NE/4 SW/4) – On-lease UTU33433, BLM surface, New 8” buried gas gathering pipeline from the first meter house to the edge of the pad. Please refer to Topo D2 - Pad and Pipeline Detail.

±1,400’ (0.27 miles) – Section 5 T10S R23E (NE/4 SW/4) – On-lease UTU33433, BLM surface, New 8” buried gas gathering pipeline from the edge of the pad to tie-in to the proposed 10" gas pipeline at the main road. Please refer to Topo D and Exhibit A, Line 4. From the edge of the pad, ±1,210' of existing 4" gas pipeline will be upgraded.

±120’ (0.02 miles) – Section 5 T10S R23E (SE/4 NW/4) – On-lease UTU33433, BLM surface, New 10” buried gas gathering pipeline from the main road intersection to the 1023-5B intersection. Please refer to Exhibit A, Line 5. This pipeline will be used concurrently with the Bonanza 1023-5C and the Bonanza 1023-5D pads.

±2,210’ (0.42 miles) – Section 5 T10S R23E (S/2 SE/4) – On-lease UTU33433, BLM surface, New 10” buried gas gathering pipeline from the 1023-5K intersection traveling Southeast to tie-in to the existing buried 16" gas pipeline. Please refer to Exhibit A, Line 7. This pipeline will be used concurrently with the Bonanza 1023-5D, Bonanza 1023-5C, Bonanza 1023-5B and Bonanza 1023-5H pads.

LIQUID GATHERING

The total liquid gathering pipeline distance from the separator to the tie in point is ±3,990’ and the individual segments are broken up as follows:

The following segments are "onlease", no ROW needed.

±570’ (0.12 miles) – Section 5 T10S R23E (NE/4 SW/4) – On-lease UTU33433, BLM surface, New 6” buried liquid gathering pipeline from the separator to the edge of the pad. Please refer to Topo D2 Pad and Pipeline Detail.

±1,400’ (0.27 miles) – Section 5 T10S R23E (NE/4 SW/4) – On-lease UTU33433, BLM surface, New 6” buried liquid gathering pipeline from the edge of the pad to tie-in to the proposed 6" liquid pipeline at the main road intersection. Please refer to Exhibit B, Line 13.

±120’ (0.02 miles) – Section 5 T10S R23E (SW/2 NE/4) – On-lease UTU33433, BLM surface, New 6” buried liquid gathering pipeline from the main road intersection to the 1023-5B intersection. Please Exhibit B, Line 6. This pipeline will be used concurrently with the Bonanza 1023-5C and Bonanza 1023-5D pads.

±1,830’ (0.35 miles) – Section 5 T10S R23E (SW/4 NE/4) – On-lease UTU33433, BLM surface, New 6” buried liquid gathering pipeline from the main road intersection traveling Southeast to the tie-in point. Please refer Exhibit B, Line 7. This pipeline will be used concurrently with the Bonanza 1023-5C, Bonanza 1023-5D and Bonanza 1023-5B pads.

±70’ (0.01 miles) – Section 5 T10S R23E (NE/4 SE/4) – On-lease UTU33433, BLM surface, New 6” buried liquid gathering pipeline from the tie-in point to the compressor site. Please refer to Exhibit B, Line 8. This pipeline will be used concurrently with the Bonanza 1023-5C, Bonanza 1023-5D, Bonanza 1023-5B and Bonanza 1023-5H pads.

Pipeline Gathering Construction

Gathering (pipeline) infrastructure will be utilized to collect and transport gas and fluids from the wells which are owned and operated by Kerr McGee. Gas gathering pipeline(s,) gas lift, or liquids pipelines may be constructed to lie on the surface or be buried. Where the pipeline is adjacent to the road or well pad, the road and/or well pad will be utilized for construction activities and staging. The area of disturbance during construction from the edge of road or well pad will typically be 30' in width. Where pipelines run cross country, the width of disturbance will typically be 45 ft for buried lines and 30 ft for surface lines. In addition, Kerr-McGee requests for a permanent 30' distrubance width that will be maintained for the portion adjacent to the road. The need for the 30' permanent distrubance width is for maintenance and repairs. Cross country permanent distrubance width also are required to be 30ft.

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Above-ground installation will generally not require clearing of vegetation or blading of the surface, except where safety considerations necessitate earthwork. In some surface pipeline installation instances pipe cannot be constructed where it will lay. In these cases where an above-ground pipeline is constructed parallel and adjacent to a road, it will be welded/fused on the road and then lifted from the road to the pipeline route. In other cases where a pipeline route is not parallel and adjacent to a road (cross-country between sites), it will be welded/fused in place at a well pad, access road, or designated work area and pulled between connection locations with a suitable piece of equipment.

Buried pipelines will generally be installed parallel and adjacent to existing and/or newly constructed roads and within the permitted disturbance corridor. Buried pipelines may vary from 2 inches (typically fuel gas lines) to 24 inches (typically transportation lines) in diameter, but 6 to 16 inches is typical for a buried gas line. The diameter of liquids pipelines may vary from 2 inches to 12 inches, but 6 inches is the typical diameter. Gas lift lines may vary from 2 to 12 inches in diameter, but 6-inch diameter pipes are generally used for gas lift. If two or more pipelines are present (gas gathering, gas lift, and fluids), they will share a common trench where possible.

Typically, to install a buried pipeline, topsoil will be removed, windrowed and placed on the non-working side of the route for later reclamation. Because working room is limited, the spoil may be spread out across the working side and construction will take place on the spoil. The working side of the corridor will be used for pipe stringing, bending, welding and equipment travel. Small areas on the working side displaying ruts or uneven ground will be groomed to facilitate the safe passage of equipment. After the pipelines are installed, spoil will be placed back into the trench, and the topsoil will be redistributed over the disturbed corridor prior to final reclamation. Typical depth of the trench will be 6 feet, but depths may vary according to site-specific conditions (presence of bedrock, etc.). The proposed trench width for the pipeline would range from 18-48 inches.

The pipeline will be welded along the proposed route and lowered into place. Trenching equipment will cut through the soil or into the bedrock and create good backfill, eliminating the need to remove large rocks. The proposed buried pipeline will be visually and radiographically inspected and the entire pipeline will be pneumatically or hydrostatically tested before being placed into service. Routine vehicle traffic will be prevented from using pipeline routes as travel ways by posting signs at the route’s intersection with an access road.

The liquid gathering lines will be made of polyethylene or a composite polyethylene/steel or polyethylene/fiberglass that is not subject to internal or external pipe corrosion. The content of the produced fluids to be transferred by the liquid gathering system will be approximately 92% produced water and 8% condensate. Trunk line valve connections for the water gathering system will be below ground but accessible from the surface in order to prevent freezing during winter time.

If pipelines or roads encounter a drainage that could be subject to flooding or surface water during extreme precipitation events, Kerr-McGee will apply all applicable Army Corps mandates as well as the BLM’s Hydraulic Considerations for Pipeline Crossings of Stream Channels (BLM Technical Note 423, April 2007). In addition, all stream and drainage crossings will be evaluated to determine the need for stream alteration permits from the State of Utah Division of Water Rights and if necessary, required permits will be secured. Similarly, where a road or pipeline crossing exists the pipe will be butt welded and buried to a depth between 24 and 48 inches or more. Dirt roads will be cut and restored to a condition equivalent to the existing condition. All Uintah County road encroachment and crossing permits, where applicable, will be obtained prior to crossing construction. In no case will pressure testing of pipelines result in discharge of liquids to the surface.

Pipeline signs will be installed along the route to indicate the pipeline proximity, ownership, and to provide emergency contact phone numbers. Above ground valves and lateral T's will be installed at various locations for production integrity and safety purposes.

Upon completion of the proposed buried pipeline, the entire area of disturbance will be reclaimed to the standards proposed in the Green River District Reclamation Guidelines. Please refer to section J for more details regarding final reclamation.

When no longer deemed necessary by the operator, Kerr-McGee or it's successor will consult with the BLM, Vernal Field Office before terminating of the use of the pipeline(s).

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The Anadarko Completions Transportation System (ACTS) information:

Please refer to Exhibit C for ACTs Lines

Kerr-McGee will use either a closed loop drilling system that will require one pit and one storage area to be constructed on the drilling pad or a traditional drilling operation with one pit. The storage area will be used to contain only the de-watered drill cuttings and will be lined and reclaimed according to traditional pit closure standards. The pit will be constructed to allow for completion operations. The completion operations pit is lined and will be used for the wells drilled on the pad or used as part of our Anadarko Completions Transportation (ACTS) system which is disussed in more detail below. Using the closed loop drilling system will allow Kerr-McGee to decrease the amount of disturbance/footprint on location compared to a single large drilling/completion pit.

If Kerr-McGee does not use a closed loop system, it will construct a drilling reserve pit to contain drill cuttings and for use in completion operations. Depending on the location of the pit, its relation to future drilling locations, the reserve/completion pit will be utilized for the completion of the wells on that pad and/or be used as part of our ACTS system.

Kerr-McGee will use ACTS to optimize the completion processes for multiple pads across the project area which may include up to a section of development. ACTS will facilitate management of frac fluids by utilizing existing reserve pits and temporary, surface-laid aluminum liquids transfer lines between frac locations. The pit will be refurbished as follows when a traditional drill pit is used: mix and pile up drill cuttings with dry dirt, bury the original liner in the pit, walk bottom of pit with cat. Kerr-McGee will reline the pit with a 30 mil liner and double felt padding. The refurbished pit will be the same size or smaller as specified in the originally approved ROW/APD. The pit refurb will be done in a normal procedure and there will be no modification to the pit.

All four sides of the completions pit will be fenced in according to standard pit fencing procedures. Netting will be installed over all pits.

The collected hydrocarbons will be treated and sold at approved sales facilities. A loading rack with drip containment will also be installed where water trucks would unload and load to prevent damage caused from pulling hoses in and out of the pit .

ACTS will require temporarily laying multiple 6” aluminum water transfer lines on the surface between either existing or refurbished reserve pits. Please see the attached ACTS exhibit C for placement of the proposed temporary lines. The temporary aluminum transfer lines will be utilized to transport frac fluid being injected and/or recovered during the completion process and will be laid adjacent to existing access roads or pipeline corridors. Upon completion of the frac operation, the liquids transfer lines will be flushed with fresh water and purged with compressed air. The contents of the transfer lines will be flushed into a water truck for delivery to another ACTS location or a reserve pit.

The volume of frac fluid transported through a water transfer line will vary, but volume is projected to be approximately 1.75 bbls per 50-foot joint. Although the maximum working pressure is 125 psig, the liquids transfer lines will be operated at a pressure of approximately 30 to 40 psig. Kerr-McGee requests to keep the netted pit open for one year from first production of the first produced well on the pad. During this time the surrounding well location completion fluids may be recycled in this pit and utilized for other frac jobs in the area. After one year Kerr-McGee will backfill the pit and reclaim. If the pit is not needed for an entire year it will be backfilled and reclaimed earlier. Kerr-McGee understands that due to the temporary nature of this system, BLM considers this a casual use situation; therefore, no permanent ROW or temporary use plan will need to be issued by the BLM.

E. Location and Types of Water Supply:

Water for drilling and completion operations will be obtained from the following sources:

Permit # 49-2307	JD Field Services	Green River- Section 15, T2N, R22E
Permit # 49-2321	R.N. Industries	White River- Section 2, T10S, R24E
Permit # 49-2319	R.N. Industries	White River- Various Sources
Permit # 49-2320	R.N. Industries	Green River- Section 33, T8S, R23E

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Water will be hauled to location over the roads marked on Maps A and B.

No water well is to be drilled on this lease.

F. Construction Materials:

Construction operations will typically be completed with native materials found on location. Construction materials that must be imported to the site (mineral material aggregate, soils or materials suitable for fill/surfacing) will be obtained from a nearby permitted source (described in site-specific documents). No construction materials will be removed from federal lands without prior approval from the BLM. A source location other than an on-location construction site will be designated either via a map or narrative within the project specific materials provided to the BLM.

G. Methods for Handling Waste:

All wastes subject to regulation will be handled in compliance with applicable laws to minimize the potential for leaks or spills to the environment. Kerr-McGee also maintains a Spill Control and Countermeasure Plan, which includes notification requirements, including the BLM, for all reportable spills of oil, produced liquids, and hazardous materials.

Any accidental release, such as a leak or spill in excess of the reportable quantity, as established by 40 CFR Part 117.3, will be reported as per the requirements of CERCLA, Section 102 B. If a release involves petroleum hydrocarbons or produced liquids, Kerr-McGee will comply with the notification requirements of NTL-3A. Drill cuttings and/or drilling fluids will be contained in the reserve/frac pit whether a closed loop system is used or not. Cuttings will be buried in pit(s) upon closure. Unless specifically approved by the BLM, no oil or other oil-based drilling additives, chromium/metals-based, or saline muds will be used during drilling. Only fresh water (as specified above), biodegradable polymer soap, bentonite clay, and/or non-toxic additives will be used in the mud system.

Pits will be constructed to minimize the accumulation of surface precipitation runoff into the pit (via appropriate placement of subsoil storage areas and/or construction of berms, ditches, etc). Should unexpected liquid petroleum hydrocarbons (crude oil or condensate) be encountered during drilling, completions or well testing, liquid petroleum hydrocarbons will either be contained in test tanks on the well site or evacuated by vacuum trucks and transported to an approved disposal/ sales facility. Should petroleum hydrocarbons unexpectedly be released into a pit, they will be removed as soon as practical but in no case will they remain longer than 72 hours unless an alternate is approved by the BLM. Should timely removal not be feasible, the pit will be netted as soon as practical. Similarly, hydrocarbon removal will take place prior to the closure of the pit, unless authorization is provided for disposal via alternate pit closure methods (e.g. solidification).

The reserve and/or fracture stimulation pit will be lined with an impermeable liner. The liner will be a synthetic material 30 mil or thicker. The bottom and side walls of the pit will be void of any sharp rocks that could puncture the liner. The liner will be installed over smooth fill subgrade that is free of pockets, loose rocks, or other materials (i.e. sand, sifted dirt, bentonite, straw, etc.) that could damage the liner. After evaporation and when dry, the reserve pit liners will be cut off, ripped and/or folded back (as safety considerations allow) as near to the mud surface as possible and buried on location or hauled to a landfill prior to backfilling the pit with a minimum of five feet of soil material.

Where necessary and if conditions (freeboard, etc.) allow, produced liquids from newly completed wells may be temporarily disposed of into pits for a period not to exceed 90 days as per Onshore Order Number 7 (OSO 7). Subsequently, permanent approved produced water disposal methods will be employed in accordance with OSO 7 and/or as described in a Water Management Plan (WMP). Otherwise, fluids disposal locations and associated haul routes, for ROW consideration, are typically depicted on Topo A of individual projects. Revisions to the water source or method of transportation will be subject to written approval from the BLM.

Any additional pits necessary for subsequent operations, such as temporary flare or workover pits, will be contained within the originally approved well pad and disturbance boundaries. Such temporary pits will be backfilled and reclaimed within 180 days of completion of work at a well location.

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Pits containing drilling cuttings, mud, and/or completions fluids will be allowed to dry. Any free fluids remaining after one year from reaching total depth, date of completion, and/or determination of inactivity will be removed (as weather conditions allow) to an approved site and the pit reclaimed. Installation and operation of any sprinklers, pumps, and equipment will ensure that water spray or mist does not drift.

No garbage or non-exempt substances as defined by Resource Conservation and Recovery Act (RCRA) subtitle C will be placed in the reserve pit. All refuse (trash and other solid waste including cans, paper, cable, etc.) generated during construction, drilling, completion, and well testing activities will be contained in an enclosed receptacle, removed from the drill locations promptly, and transported to an approved disposal facility. Immediately after removal of the drilling rig, all debris and other waste materials not contained within trash receptacles will be collected and removed from the well location.

For the protection of livestock and wildlife, all open pits (excluding flare pits) will be fenced to prevent wildlife or livestock entry. Total height of pit fencing will be at least 42 inches and corner posts will be cemented and/or braced in such a manner as to keep the fence tight at all times. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet. Siphons, catchments, and absorbent pads will be installed to keep hydrocarbons produced by the drilling rig or other equipment on location from entering the reserve pit. Hydrocarbons, contaminated pads, and/or soils will be disposed of in accordance with state and federal requirements.

Portable, self-contained chemical toilets and/or sewage processing facilities will be provided for human waste disposal. Upon completion of operations, or as required, the toilet holding tanks will be pumped and the contents disposed of in an approved sewage disposal facility. All applicable regulations pertaining to disposal of human and solid waste will be observed.

Materials Management

Hazardous materials above reportable quantities will not be produced by drilling or completing proposed wells or constructing the pipelines/facilities. The term “hazardous materials” as used here means: (1) any substance, pollutant, or containment listed as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980, as amended 42 U.S.C. 9601 et seq., and the regulations issued under CERCLA; and (2) any hazardous waste as defined in RCRA of 1976, as amended. In addition, no extremely hazardous substance, as defined in 40 CFR 355, in threshold planning quantities, would be used, produced, stored, transported, or disposed of while producing any well.

Hazardous materials may be contained in some grease or lubricants, solvents, acids, paint, and herbicides, among others as defined above. Kerr-McGee maintains a file, per 29 CFR 1910.1200 (g) containing current Material Safety Data Sheets (MSDS) for all chemicals, compounds, and/or substances that are used during the course of construction, drilling, completion, and production operations for this project. The transport, use, storage and handling of hazardous materials will follow procedures specified by federal and state regulations. Transportation of hazardous materials to the well location is regulated by the Department of Transportation (DOT) under 49 CFR, Parts 171-180. DOT regulations pertain to the packing, container handling, labeling, vehicle placarding, and other safety aspects.

Potentially hazardous materials used in the development or operation of wells will be kept in limited quantities on well sites and at the production facilities for short periods of time. Chemicals meeting the criteria for being an acutely hazardous material/substance or meet the quantities criteria per BLM Instruction Memorandum No. 93-344 will not be used.

Chemicals subject to reporting under Title III of the Superfund Amendments and Reauthorization Act (SARA) in quantities of 10,000 pounds or more may be produced and/or stored at production facilities (crude oil/condensate, produced water). They may also be kept in limited quantities on drilling sites (barite, diesel fuel, cement, cottonseed hulls etc.) for short periods of time during drilling or completion activities.

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Fluids disposal and pipeline/haul routes are depicted on Topo Map A.

Any produced water separated from recoverable condensate from the proposed well will be contained in a water tank and will then be transported by pipeline and/or truck to one of the pre-approved disposal sites:

RNI in Sec. 5 T9S R22E
NBU #159 in Sec. 35 T9S R21E
Ace Oilfield in Sec. 2 T6S R20E
MC&MC in Sec. 12 T6S R19E
Pipeline Facility in Sec. 36 T9S R20E
Goat Pasture Evaporation Pond in SW/4 Sec. 16 T10S R22E
Bonanza Evaporation Pond in Sec. 2 T10S R23E

Or to one of the following Kerr-McGee active Salt Water Disposal (SWD) wells:

NBU 159 SWD in Sec. 35 T9S R21E
CIGE 112D SWD in Sec. 19 T9S R21E
CIGE 114 SWD in Sec. 34 T9S R21E
NBU 921-34K SWD in Sec. 34 T9S R21E
NBU 921-33F SWD in Sec. 34 T9S R21E

H. Ancillary Facilities:

No additional ancillary facilities are planned for this location.

I. Well Site Layout:

The location, orientation and aerial extent of each drill pad, reserve/completion/flare pit (for closed loop or non-closed loop operations), access road ingress/egress points, drilling rig, dikes/ditches, existing wells/infrastructure, proposed cuts and fills, and topsoil and spoil material stockpile locations are depicted on the exhibits for each project, where applicable. Site-specific conditions may require slight deviation in actual equipment depending on whether a closed loop system is used. Surface distance may be less if using closed loop. But in either case, the area of distrubance will not exceed the maximum disturbance outlined in the attached exhibits.

For the protection of livestock and wildlife, all open pits and cellars will be fenced to prevent wildlife or livestock entry. Total height of pit fencing will be at least 42 inches and corner posts will be cemented and/or braced in such a manner as to keep the fence tight at all times. Standard steel, wood, or pipe posts shall be used between the corner braces. Maximum distance between any 2 fence posts shall be no greater than 16 feet.

Each well will utilize either a centralized tank battery, centralized fluids management system, or have tanks installed on its pad. Production/ Produced Liquid tanks will be constructed, maintained, and operated to prevent unauthorized surface or subsurface discharges of liquids and to prevent livestock or wildlife entry. The tanks will be kept reasonably free from surface accumulations of liquid hydrocarbons. The tanks are not to be used for disposal of liquids from additional sources without prior approval of BLM.

J. Plans for Surface Reclamation:

The surface reclamation will be undertaken in two phases: interim and final. Interim reclamation is conducted following well completion and extends through the period of production. Interim reclamation is for the area of the well pad that is not required for production activities. Final reclamation is conducted following well plugging/conversion and/or facility abandonment processes.

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Reclamation activities in both phases may include but is not limited to the re-contouring or re-configuration of topographic surfaces, restoration of drainage systems, segregation of spoils materials, minimizing surface disturbance, re-evaluating backfill requirements, pit closure, topsoil redistribution, soil treatments, seeding and weed control.

Interim Reclamation

Interim reclamation may include pit evaporation, fluid removal, pit solidification, re-contouring, ripping, spreading top soil, seeding, and/or weed control. Interim reclamation will be performed in accordance with OSO 1, or written notification will be provided to the BLM for approval. Where feasible, drilling locations, reserve pits, or access routes not utilized for production operations will be re-contoured to a natural appearance.

Interim re-contouring involves bringing all construction material from cuts and fills back onto the well pad and site and reestablishing the natural contours where desirable and practical. Fill and stockpiled spoils no longer necessary to the operation will be spread on the cut slopes and covered with stockpiled topsoil. All stockpiled top soils will be used for interim reclamation where practical to maintain soil viability. Where possible, the land surface will be left “rough” after re-contouring to ensure that the maximum surface area will be available to support the reestablishment of vegetative cover.

A reserve pit, upon being allowed to dry, will be backfilled and compacted with cover materials that are void of any topsoil, vegetation, large stones, rocks or foreign objects. Soils that are moisture laden, saturated, or partially/completely frozen will not be used for backfill or cover. The pit area will be mounded to allow for settling and to promote positive surface drainage away from the pit. Disposal of pit fluids and linings is discussed in Section G.

Final Reclamation

Final reclamation will be performed for unproductive wells and after the end of the life of a productive well. As soon as practical after the conclusion of drilling and testing operations, unproductive drill holes will be plugged and abandoned (P&A). Site and road reclamation will commence following plugging. In no case will reclamation at non-producing locations be initiated later than six (6) months from the date a well is plugged. A joint inspection of the disturbed area to be reclaimed may be requested by Kerr-McGee. The primary purpose of this inspection will be to review the existing conditions, or agree upon a revised final reclamation and abandonment plan. The BLM will be notified prior to commencement of reclamation operations. A Notice of Intent to Abandon will be filed for final recommendations regarding surface reclamation.

After plugging, all wellhead equipment that is no longer needed will be removed, and the well site will be reclaimed. Final contouring will blend with and follow as closely as practical the natural terrain and contours of the original site and surrounding areas. After re-contouring the site to the approximate contour that existed prior to pad construction, final grading will be conducted over the entire surface of the well site and access road. The area will be ripped to a depth of 18 to 24 inches on 18 to 24-inch centers, where practical. The surface soil material will be pitted with small depressions to form longitudinal depressions 12 to 18 inches deep, where practical. The entire area will be uniformly covered with the depressions constructed perpendicular to the natural flow of water.

Reclamation of roads will be performed at the discretion of the BLM. All unnecessary surface equipment and structures (e.g. cattle guards) and water control structures (e.g. culverts, drainage pipes) not needed to facilitate successful reclamation will be removed during final reclamation. Roads that will be reclaimed will be ripped to a depth of 18 inches where practical, re-contoured to approximate the original contour of the ground and seeded in accordance with the seeding specifications of the BLM.

Upon successfully completing reclamation of a P&A location, a Final Abandonment Notice will be submitted to the BLM.

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Measures Common to Interim and Final Reclamation

Soil preparation will be conducted using a disk for areas in need of more soil preparation following site preparation. This will provide primary soil tillage to a depth no greater than 6 inches. Prior to reseeding, compacted areas will be scarified by ripping or chiseling to loosen compacted soils, promote water infiltration, and improve soil aeration and root penetration.

Seeding will occur year-round as conditions allow and will typically be accomplished through the use of a no-till rangeland style seed drill with a "picker box" in order to seed "fluffy" seed. Where drill seeding is not the preferred method, seed will be broadcast and then raked into the ground at double the rate of drill seeding. Seed mixes appropriate to the native plant community as determined and specified for each project location based on the site specific soils will be used for re-vegetation. The seed mixes will be selected from a list provided by or approved by the BLM, or a specific seed mix will be proposed by Kerr-McGee to the BLM and used after its approval. The selected specific seed mix for each well location and road segment will be utilized while performing interim and final reclamation for each project. All seed will be certified and tags will be maintained by Kerr-McGee. Every effort will be made to obtain "cheat grass free seed".

Seed Mix to be used for Well Site, Access Road, and Pipeline (as applicable):

Bonanza Area Mix	**Pure Live Seed lbs/acre**
Crested Wheat (Hycrest)	2
Bottlebrush Squirreltail	1
Western Wheatgrass	1
Indian Ricegrass	1
Fourwing Saltbush	2
Shadscale	2
Forage Kochia	0.25
Rocky Mountain Bee	0.5
Total	9.75

Additional soil amendments and/or stabilization may be required on sites with poor soils and/or excessive erosion potential. Where severe erosion can become a problem and/or the use of machinery is not practical, seed will be hand broadcast and raked with twice the specified amount of seed. Slopes will be stabilized using materials specifically designed to prevent erosion on steep slopes and hold seed in place so vegetation can become permanently established. These materials will include, but are not limited to: erosion control blankets, hydro-mulch, and/or bonded fiber matrix at a rate to achieve a minimum of 80 percent soil coverage. Soil amendments such as "Sustain" (an organic fertilizer that will be applied at the rate 1,800 – 2,100 lbs/acre with seed) may also be dry broadcast or applied with hydro-seeding equipment.

Weed Control

All weed management will be done in accordance with the Vernal BLM Surface Disturbance Weed Policy. Noxious weeds will be controlled, as applicable, on project areas. Monitoring and management of noxious and/or invasive weeds of concern will be completed annually until the project is deemed successfully reclaimed by the surface management agency and/or owner according to the Anadarko Integrated Weed Management Plan. Noxious weed infestations will be mapped using a GPS unit and submitted to the BLM with information required in the Vernal BLM Surface Disturbance Weed Policy. If herbicide is to be applied it will be done according to an approved Pesticide Use Permit (PUP), inclusive of applicable locations. All pesticide applications will be recorded using a Pesticide Application Record (PAR) and will be submitted along with a Pesticide Use Report (PUR) annually prior to Dec. 31.

Monitoring

Monitoring of reclaimed project areas will be completed annually during the growing season and actions to ensure reclamation success will be taken as needed. During the first two growing seasons an ocular methodology will be used to

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determine the success of the reclamation activities. During the 3rd growing season a 200 point line intercept (quantitative) methodology will be used to obtain basal cover. The goal is to have the reclaimed area reach 30% basal cover when compared to the reference site. If after three growing seasons the area has not reached 30% basal cover, additional reclamation activities may be necessary. Monitoring will continue until the reclaimed area reaches 75% basal cover of desirable vegetation when compared to the reference site. (Green River District Reclamation Guidelines)

All monitoring reports will be submitted electronically to the Vernal BLM in the form of a geo-database no later than March 1st of the calendar year following the data collection.

K. Surface/Mineral Ownership:

United States of America
Bureau of Land Management
170 South 500 East
Vernal, UT 84078
(435)781-4400

L. Other Information:

Onsite Specifics:

- Construction: 30 Mil Double Felt.
- Facilities: Will be painted Shadow Grey. Will need separate condensate tanks due to BHL for the Bonanza 1023-5O2AS and the Bonanza 1023-5J2DS cross CA boundaries.
- Top Soil: Need 6" of topsoil. Move top soil pile north onto finger.

Cultural and Paleontological Resources

All personnel are strictly prohibited from collecting artifacts, any paleontological specimens or fossils, and from disturbing any significant cultural resources in the area. If artifacts, fossils, or any culturally sensitive materials are exposed or identified in the area of construction, all construction operations that would affect the newly discovered resource will cease, and Kerr-McGee will provide immediate notification to the BLM.

Resource Reports:

A Class I literature survey was completed on April 23, 2010 by Montgomery Archaeological Consultants, Inc (MOAC). For additional details please refer to report MOAC 10-056.

A paleontological reconnaissance survey was completed on May 13, 2010 by SWCA Environmental Consultants. For additional details please refer to report UT10-14314-14.

Biological field survey was completed on August 20, 2010 by Grasslands Consulting, Inc (GCI). For additional details please refer to report GCI-206.

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Proposed Action Annual Emissions Tables:

Table 1: Proposed Action Annual Emissions (tons/year)[1]

Pollutant	Development	Production	Total
NOx	3.8	0.12	3.92
CO	2.2	0.11	2.31
VOC	0.1	4.9	5
SO_2	0.005	0.0043	0.0093
PM_{10}	1.7	0.11	1.81
$PM_{2.5}$	0.4	0.025	0.425
Benzene	2.2E-03	0.044	0.046
Toluene	1.6E-03	0.103	0.105
Ethylbenzene	3.4E-04	0.005	0.005
Xylene	1.1E-03	0.076	0.077
n-Hexane	1.7E-04	0.145	0.145
Formaldehyde	1.3E-02	8.64E-05	1.31E-02

[1] Emissions include 1 producing well and associated operations traffic during the year in which the project is developed

Table 2: Proposed Action versus 2012 WRAP Phase III Emissions Inventory Comparison

Species	Proposed Action Production Emissions (ton/yr)	2012 Uintah Basin Emission Inventory[a] (ton/yr)	Percentage of Proposed Action to WRAP Phase III
NOx	31.36	16,547	0.19%
VOC	40	127,495	0.03%

[a] http://www.wrapair.org/forums/ogwg/PhaseIII_Inventory.html Uintah Basin Data

M. Lessee's or Operators' Representative & Certification:

Gina T. Becker
Regulatory Analyst II
Kerr-McGee Oil & Gas Onshore LP
PO Box 173779
Denver, CO 80217-3779
(720) 929-6086

Tommy Thompson
General Manager, Drilling
Kerr-McGee Oil & Gas Onshore LP
PO Box 173779
Denver, CO 80217-3779
(720) 929-6724

Certification: All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved Plan of Operations, and any applicable Notice to Lessees.

The Operator will be fully responsible for the actions of its subcontractors. A complete copy of the approved "Application for Permit to Drill" will be furnished to the field representative(s) to ensure compliance and shall be on location during all construction and drilling operations.

Kerr-McGee Oil & Gas Onshore LP is considered to be the operator of the subject well. Kerr-McGee Oil & Gas Onshore LP agrees to be responsible under terms and conditions of the lease for the operations conducted upon leased lands.

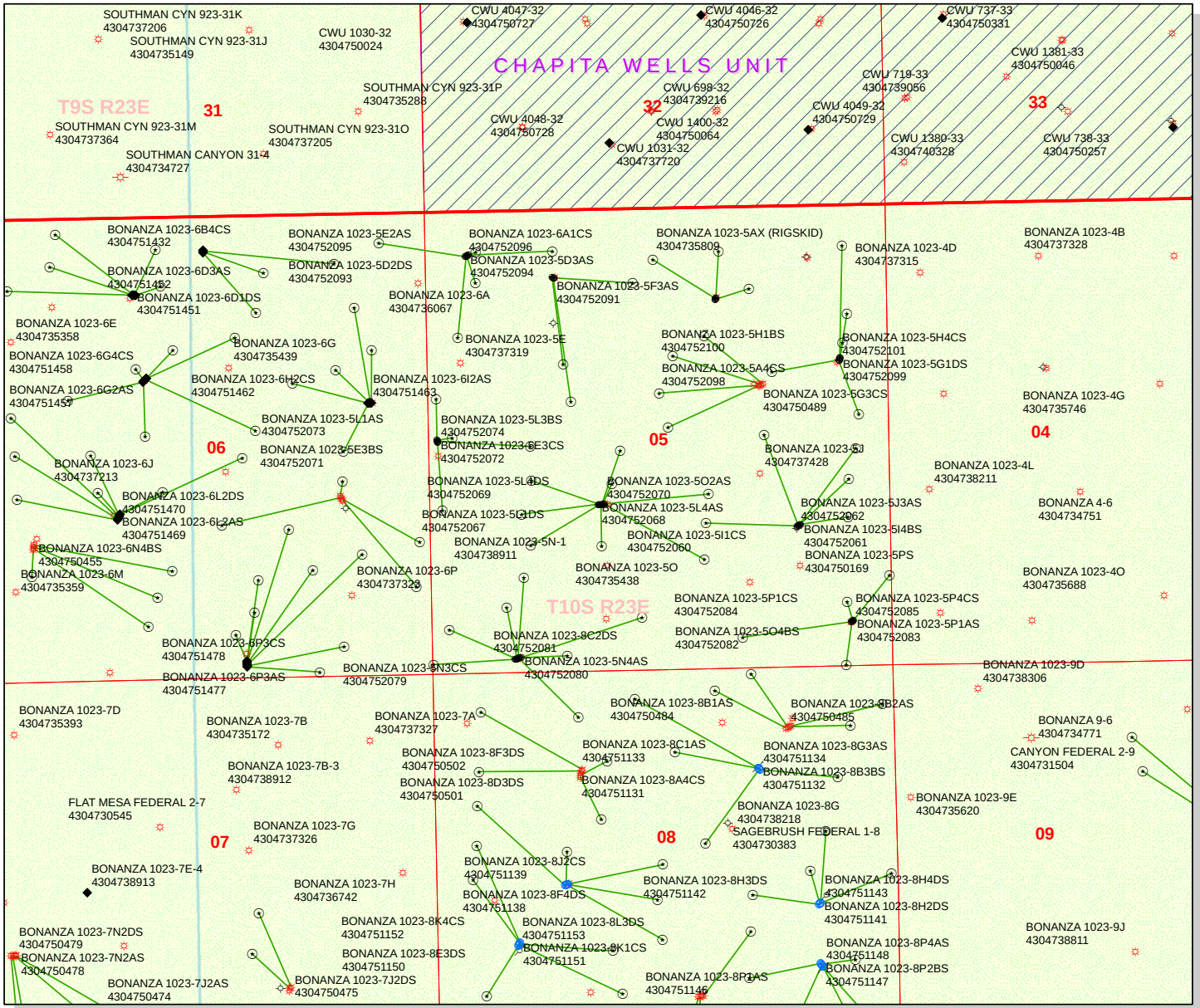
Bond coverage pursuant to 43 CFR 3104 for lease activities is being provided by Bureau of Land Management Nationwide Bond WYB000291.

I hereby certify that I, or persons under my supervision, have inspected the proposed drill site and access route, that I am familiar with the conditions that currently exist; that I have full knowledge of the State and Federal laws applicable to this operation; that the statements made in this plan are, to the best of my knowledge, true and correct; and the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Gina T.Becker

October 14, 2011
Date

API Well Number: 43047520680000



API Number: 4304752068

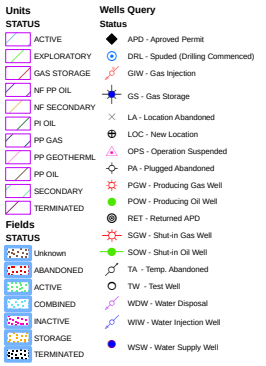
Well Name: BONANZA 1023-5L4AS

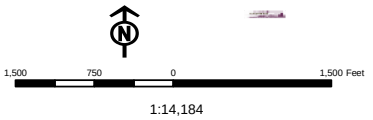
Township T1.0 . Range R2.3 . Section 05

Meridian: SLBM

Operator: KERR-MCGEE OIL & GAS ONSHORE, L.P.

Map Prepared:
Map Produced by Diana Mason





1:14,184

RECEIVED: October 26, 2011

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 10/17/2011 **API NO. ASSIGNED:** 43047520680000
WELL NAME: BONANZA 1023-5L4AS
OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P. (N2995) **PHONE NUMBER:** 720 929-6086
CONTACT: Gina Becker

PROPOSED LOCATION: NESW 05 100S 230E **Permit Tech Review:** ☑
SURFACE: 1951 FSL 1965 FWL **Engineering Review:** ☑
BOTTOM: 1865 FSL 1083 FWL **Geology Review:** ☑
COUNTY: UINTAH
LATITUDE: 39.97596 **LONGITUDE:** -109.35324
UTM SURF EASTINGS: 640620.00 **NORTHINGS:** 4426387.00
FIELD NAME: NATURAL BUTTES
LEASE TYPE: 1 - Federal
LEASE NUMBER: UTU33433 **PROPOSED PRODUCING FORMATION(S):** WASATCH-MESA VERDE
SURFACE OWNER: 1 - Federal **COALBED METHANE:** NO

RECEIVED AND/OR REVIEWED:

- ☑ **PLAT**
- ☑ **Bond:** FEDERAL - WYB000291
- ☐ **Potash**
- ☐ **Oil Shale 190-5**
- ☐ **Oil Shale 190-3**
- ☐ **Oil Shale 190-13**
- ☑ **Water Permit:** 43-8496
- ☐ **RDCC Review:**
- ☐ **Fee Surface Agreement**
- ☑ **Intent to Commingle**

Commingling Approved

LOCATION AND SITING:

- ☐ **R649-2-3.**

Unit:

- ☐ **R649-3-2. General**
- ☐ **R649-3-3. Exception**
- ☑ **Drilling Unit**

Board Cause No: Cause 179-14
Effective Date: 6/12/2008
Siting: 460' Fr Ext Drl Unit Boundary

- ☑ **R649-3-11. Directional Drill**

Comments: Presite Completed

Stipulations:
3 - Commingling - ddoucet
4 - Federal Approval - dmason
15 - Directional - dmason

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GARY R. HERBERT
Governor
GREGORY S. BELL
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

Permit To Drill

****

Well Name: BONANZA 1023-5L4AS
API Well Number: 43047520680000
Lease Number: UTU33433
Surface Owner: FEDERAL
Approval Date: 10/26/2011

Issued to:
KERR-MCGEE OIL & GAS ONSHORE, L.P., P.O. Box 173779, Denver, CO 80217

Authority:
Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 179-14. The expected producing formation or pool is the WASATCH-MESA VERDE Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:
This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

Commingle:
In accordance with Board Cause No. 179-14, commingling of the production from the Wasatch formation and the Mesaverde formation in this well is allowed.

General:
Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:
State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Notification Requirements:
The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284 (please leave a voicemail message if not available)
  OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at http://oilgas.ogm.utah.gov

Reporting Requirements:
All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) – due within 5 days of spudding the well
- Monthly Status Report (Form 9) – due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) – due prior to implementation
- Written Notice of Emergency Changes (Form 9) – due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) – due prior to implementation
- Report of Water Encountered (Form 7) – due within 30 days after completion
- Well Completion Report (Form 8) – due within 30 days after completion or plugging

Approved By:

For John Rogers
Associate Director, Oil & Gas

Form 3160-3
(August 2007)

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BLM

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0136
Expires July 31, 2010

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. UTU33433

6. If Indian, Allottee or Tribe Name

1a. Type of Work: ☒ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No. CA-UTU-74473

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☒ Multiple Zone

8. Lease Name and Well No. BONANZA 1023-5L4AS

2. Name of Operator KERR-MCGEE OIL & GAS ONSHORE Contact: GINA T BECKER E-Mail: GINA.BECKER@ANADARKO.COM

9. API Well No. 43-047-52068

3a. Address P.O. BOX 173779 DENVER, CO 80202-3779

3b. Phone No. (include area code) Ph: 720-929-6086 Fx: 720-929-7086

10. Field and Pool, or Exploratory BONANZA

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface NESW 1951FSL 1965FWL 39.976056 N Lat, 109.353112 W Lon

At proposed prod. zone NWSW 1865FSL 1083FWL 39.975818 N Lat, 109.356258 W Lon

11. Sec., T., R., M., or Blk. and Survey or Area Sec 5 T10S R23E Mer SLB

14. Distance in miles and direction from nearest town or post office* APPROXIMATELY 48 MILES SOUTHEAST OF VERNAL, UTAH

12. County or Parish UINTAH

13. State UT

15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1083

16. No. of Acres in Lease 1923.00

17. Spacing Unit dedicated to this well

18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 554

19. Proposed Depth 8639 MD 8510 TVD

20. BLM/BIA Bond No. on file WYB000291

21. Elevations (Show whether DF, KB, RT, GL, etc. 5327 GL

22. Approximate date work will start 12/31/2011

23. Estimated duration 60-90 DAYS

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature (Electronic Submission)

Name (Printed/Typed) GINA T BECKER Ph: 720-929-6086

Date 07/06/2011

Title REGULATORY ANALYST II

Approved by (Signature) [signature]

Name (Printed/Typed) Jerry Kenczka

Date JAN 3 0 2012

Title Assistant Field Manager Lands & Mineral Resources

Office VERNAL FIELD OFFICE

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

Additional Operator Remarks (see next page)

Electronic Submission #112349 verified by the BLM Well Information System
For KERR-MCGEE OIL & GAS ONSHORE, sent to the Vernal

NOTICE OF APPROVAL

UDOGM

RECEIVED
FEB 0 3 2012
DIV. OF OIL, GAS & MINING

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

1DDDHM2SAS 11IS-[illegible]

UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VERNAL FIELD OFFICE
170 South 500 East VERNAL, UT 84078 (435) 781-4400

CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company:	**Kerr-McGee Oil & Gas Onshore, LP**	**Location:**	**NESW, Sec. 5, T10S, R23E**
Well No:	**Bonanza 1023-5L4AS**	**Lease No:**	**UTU-33433**
API No:	**43-047-52068**	**Agreement:**	

OFFICE NUMBER: (435) 781-4400

OFFICE FAX NUMBER: (435) 781-3420

A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

NOTIFICATION REQUIREMENTS

Location Construction (Notify Environmental Scientist)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: blm_ut_vn_opreport@blm.gov
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

SURFACE USE PROGRAM
CONDITIONS OF APPROVAL (COAs)

- All new and replacement internal combustion gas field engines of less than or equal to 300 design-rated horse power must not emit more than 2 grams of NOx per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower-hour.

- All new and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gram of NOx per horsepower-hour.

- Construction or drilling is not allowed for the Bonanza 1023-5M and Bonanza 1023-5P pads from January 1 – August 31 to minimize impacts during golden eagle nesting.

- If it is anticipated that construction or drilling will occur during the given timing restriction, a BLM or qualified biologist shall be notified to conduct surveys for raptors. Depending upon the results of the surveys, permission to proceed may or may not be granted by the Authorized Officer.

- All reclamation will comply with the Green River Reclamation Guidelines

- All vehicles and equipment shall be cleaned either through power-washing, or other approved method, if the vehicles or equipment were previously operated outside the Uinta Basin, to prevent weed seed introduction.

- All disturbance areas shall be monitored for noxious weeds annually, for a minimum of three growing seasons following completion of project or until desirable vegetation is established

- Noxious and invasive weeds will be controlled throughout the area of project disturbance.

- Noxious weeds will be inventoried and reported to BLM in the annual reclamation report. Where an integrated pest management program is applicable, coordination has been undertaken with the state and local management program (if existing). A copy of the pest management plan will be submitted for each project.

- A pesticide use permit (PUP) will be obtained for the project, if applicable.

- A permitted paleontologist is to be present to monitor construction at well pads 1023-5C, 5D, 5K, 5L, 5M and 5P during all surface disturbing actives: examples include the following building of the well pad, access road, and pipelines.

- The best method to avoid entrainment is to pump from an off-channel location – one that does not connect to the river during high spring flows. An infiltration gallery constructed in a BLM and Service approved location is best.

- If the pump head is located in the river channel where larval fish are known to occur, the following measures apply:
    a. do not situate the pump in a low-flow or no-flow area as these habitats tend to concentrate larval fishes;
    b. limit the amount of pumping, to the greatest extent possible, during that period of the year when larval fish may be present (April 1 to August 31); and

c. limit the amount of pumping, to the greatest extent possible, during the pre-dawn hours as larval drift studies indicate that this is a period of greatest daily activity.

- Screen all pump intakes with 3/32" mesh material.

- Approach velocities for intake structures will follow the National Marine Fisheries Service's document "Fish Screening Criteria for Anadromous Salmonids". For projects with an in-stream intake that operate in stream reaches where larval fish may be present, the approach velocity will not exceed 0.33 feet per second (ft/s).

- Report any fish impinged on the intake screen to the Service (801.975.3330) and the Utah Division of Wildlife Resources:

  Northeastern Region
  152 East 100 North, Vernal, UT 84078
  Phone: (435) 781-9453

- Discovery Stipulation: Reinitiation of section 7 consultation with the USFWS will be sought immediately if any loss of plants or occupied habitat for Pariette cactus or Uinta Basin hookless cactus is anticipated as a result of project activities.

DOWNHOLE PROGRAM
CONDITIONS OF APPROVAL (COAs)

SITE SPECIFIC DOWNHOLE COAs:

- A copy of Kerr McGee's Standard Operating Practices (SOP version: dated 7/17/08 and approved 7/28/08) shall be on location.
- Surface casing cement shall be brought to surface.
- Production casing cement shall be brought 200' up and into the surface casing.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.

- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.

- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.

- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.

- **Please submit an electronic copy of all other logs run on this well in LAS format to BLM_UT_VN_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**

- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.

- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.

- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:

    - Operator name, address, and telephone number.
    - Well name and number.
    - Well location (¼¼, Sec., Twn, Rng, and P.M.).
    - Date well was placed in a producing status (date of first production for which royalty will be paid).
    - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
    - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
    - Unit agreement and/or participating area name and number, if applicable.
    - Communitization agreement number, if applicable.

- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.

- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.

- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs,

core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.

- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.

- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.

- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.

- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.

- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.

- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU33433

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Gas Well

8. WELL NAME and NUMBER:
BONANZA 1023-5L4AS

2. NAME OF OPERATOR:
KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER:
43047520680000

3. ADDRESS OF OPERATOR:
P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER:
720 929-6526

9. FIELD and POOL or WILDCAT:
NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
1951 FSL 1965 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NESW Section: 05 Township: 10.0S Range: 23.0E Meridian: S

COUNTY:
UINTAH

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
✓ SPUD REPORT Date of Spud: 6/9/2012	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

MIRU TRIPLE A BUCKET RIG. DRILLED 20" CONDUCTOR HOLE TO 40'. RAN 14" 36.7# SCHEDULE 10 CONDUCTOR PIPE. CEMENT WITH 28 SACKS READY MIX. SPUD WELL LOCATION ON JUNE 9, 2012 AT 12:30 HRS.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
June 18, 2012

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Jaime Scharnowske	720 929-6304	Regulartory Analyst
SIGNATURE		**DATE**
N/A		6/18/2012

SUBMIT AS EMAIL | Print Form

BLM - Vernal Field Office - Notification Form

Operator KERR-McGEE OIL & GAS Rig Name/# BUCKET RIG
Submitted By J. Scharnowske Phone Number 720.929.6304
Well Name/Number BONANZA 1023-5L4AS
Qtr/Qtr NESW Section 5 Township 10S Range 23E
Lease Serial Number UTU33433
API Number 4304752068

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time 06/06/2012 17:00 HRS AM ☐ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☑ Surface Casing
- ☐ Intermediate Casing
- ☐ Production Casing
- ☐ Liner
- ☐ Other

Date/Time 06/27/2012 08:00 HRS AM ☐ PM ☐

BOPE

- ☐ Initial BOPE test at surface casing point
- ☐ BOPE test at intermediate casing point
- ☐ 30 day BOPE test
- ☐ Other

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JUN 05 2012
DIV. OF OIL, GAS & MINING

Date/Time _____ _____ AM ☐ PM ☐

Remarks ESTIMATED DATE AND TIME. PLEASE CONTACT KENNY GATHINGS AT 435.828.0986 OR LOVEL YOUNG AT 435.781.7051

FEDERAL APPROVAL OF THIS ACTION IS NECESSARY

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER:
UTU33433

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Gas Well

8. WELL NAME and NUMBER:
BONANZA 1023-5L4AS

2. NAME OF OPERATOR:
KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER:
43047520680000

3. ADDRESS OF OPERATOR:
P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER:
720 929-6526

9. FIELD and POOL or WILDCAT:
NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
1951 FSL 1965 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NESW Section: 05 Township: 10.0S Range: 23.0E Meridian: S

COUNTY:
UINTAH

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 5/30/2012	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	✓ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

THE OPERATOR REQUESTS APPROVAL FOR A FIT WAIVER, A CLOSED LOOP DRILLING OPTION, AND A PRODUCTION CASING CHANGE. ALL OTHER ASPECTS OF THE PREVIOUSLY APPROVED DRILLING PLAN WILL NOT CHANGE. PLEASE SEE THE ATTACHMENT. THANK YOU.

Accepted by the Utah Division of Oil, Gas and Mining

Date: June 26, 2012

By: Dark K Quist

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Cara Mahler	720 929-6029	Regulatory Analyst I
SIGNATURE		**DATE**
N/A		5/30/2012

RECEIVED: May. 30, 2012

Kerr-McGee Oil & Gas Onshore. L.P.

BONANZA 1023-5L4AS

Surface: 1951 FSL / 1965 FWL NESW
BHL: 1865 FSL / 1083 FWL NWSW

Section 5 T10S R23E

Uintah County, Utah
Mineral Lease: UTU-33433

ONSHORE ORDER NO. 1

DRILLING PROGRAM

1. & 2. **Estimated Tops of Important Geologic Markers:**
Estimated Depths of Anticipated Water, Oil, Gas, or Mineral Formations:

Formation	Depth	Resource
Uinta	0 - Surface	
Green River	1,291'	
Birds Nest	1,553'	Water
Mahogany	1,903'	Water
Wasatch	4,268'	Gas
Mesaverde	6,361'	Gas
Sego	8,510'	Gas
TVD	8,510'	
TD	8,639'	

3. **Pressure Control Equipment** (Schematic Attached)

Please refer to the attached Drilling Program

4. **Proposed Casing & Cementing Program:**

Please refer to the attached Drilling Program

5. **Drilling Fluids Program:**

Please refer to the attached Drilling Program

6. **Evaluation Program:**

Please refer to the attached Drilling Program

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7. Abnormal Conditions:

Maximum anticipated bottom hole pressure calculated at 8510' TVD, approximately equals 5,446 psi 0.64 psi/ft = actual bottomhole gradient

Maximum Anticipated Bottom Hole Pressure (MABHP) = Pore Pressure at TD

Maximum anticipated surface pressure equals approximately 3,562 psi (bottom hole pressure minus the pressure of a partially evacuated hole calculated at 0.22 psi/foot, per Onshore Order No. 2).

Per Onshore Order No. 2 - Max Anticipated Surf. Press.(MASP) = (Pore Pressure at next csg point-
(0.22 psi/ft-partial evac gradient x TVD of next csg point))

8. Anticipated Starting Dates:

Drilling is planned to commence immediately upon approval of this application.

9. Variances:

Please refer to the attached Drilling Program.
Onshore Order #2 – Air Drilling Variance

Kerr-McGee Oil & Gas Onshore LP (KMG) respectfully requests a variance to several requirements associated with air drilling outlined in Onshore Order 2

- Blowout Prevention Equipment (BOPE) requirements;
- Mud program requirements; and
- Special drilling operation (surface equipment placement) requirements associated with air drilling.

This Standard Operating Practices addendum provides supporting information as to why KMG current air drilling practices for constructing the surface casing hole should be granted a variance to Onshore Order 2 air drilling requirements.

The reader should note that the air rig is used only to construct a stable surface casing hole through a historically difficult lost circulation zone. A conventional rotary rig follows the air rig, and is used to drill and construct the majority of the wellbore.

More notable, KMG has used the air rig layout and procedures outlined below to drill the surface casing hole in approximately 675 wells without incident of blow out or loss of life.

Background

In a typical well, KMG utilizes an air rig for drilling the surface casing hole, an interval from the surface to surface casing depths, which varies in depth from 1,700 to 2,800 feet. The air rig drilling operation does not drill through productive or over pressured formations in KMG field, but does penetrate the Uinta and Green River Formations. The purpose of the air drilling operation is to overcome the severe loss circulation zone in the Green River known as the Bird's Nest while creating a stable hole for the surface casing. The surface casing hole is generally drilled to approximately 500 feet below the Bird's Nest.

RECEIVED: May. 30, 2012

Before the surface air rig is mobilized, a rathole rig is utilized to set and cement conductor pipe through a competent surface formation. Generally, the conductor is set at 40 feet. In some cases, conductor may be set deeper in areas that the surface formation is not found competent. This rig also drills the rat and mouse holes in preparation for the surface casing and production string drilling operations.

The air rig is then mobilized to drill the surface casing hole by drilling a 12 1/4 inch hole for the first 200 feet, then will drill a 11inch hole to just above the Bird's Nest interval with an air hammer. The hammer is then tripped and replaced with a 11 inch tri-cone bit. The tri-cone bit is used to drill to the surface casing point, approximately 500 feet below the loss circulation zone (Bird's Nest). The 8-5/8 inch surface casing is then run and cemented in place, thereby isolating the lost circulation zone.

KMG fully appreciates Onshore Order 2 well control and safety requirements associated with a typical air drilling operations. However, the requirements of Onshore Order 2 are excessive with respect to the air rig layout and drilling operation procedures that are currently in practice to drill and control the surface casing hole in KMG Fields.

Variance for BOPE Requirements
The air rig operation utilizes a properly lubricated and maintained air bowl diverter system which diverts the drilling returns to a six-inch blooie line. The air bowl is the only piece of BOPE equipment which is installed during drilling operations and is sufficient to contain the air returns associated with this drilling operation. As was discussed earlier, the drilling of the surface hole does not encounter any over pressured or productive zones, and as a result standard BOPE equipment should not be required. In addition, standard drilling practices do not support the use of BOPE on 40 feet of conductor pipe.

Variance for Mud Material Requirements
Onshore Order 2 also states that sufficient quantities of mud materials shall be maintained or readily accessible for the purpose of assuring adequate well control. Once again, the surface hole drilling operations does not encounter over pressured or productive intervals, and as a result there is not a need to control pressure in the surface hole with a mud system. Instead of mud, the air rigs utilize water from the reserve pit for well control, if necessary. A skid pump which is located near the reserve pit (see attachment) will supply the water to the well bore.

Variance for Special Drilling Operation (surface equipment placement) Requirements
Onshore Order 2 requires specific safety distances or setbacks for the placement of associated standard air drilling equipment, wellbore, and reserve pits. The air rigs used to drill the surface holes are not typical of an air rig used to drill a producing hole in other parts of the US. These are smaller in nature and designed to fit a KMG location. The typical air rig layout for drilling surface hole in the field is attached.

Typically the blooie line discharge point is required to be 100 feet from the well bore. In the case of a KMG well, the reserve pit is only 45 feet from the rig and is used for the drill cuttings. The blooie line, which transports the drill cuttings from the well to the reserve pit, subsequently discharges only 45 feet from the well bore.

Typically the air rig compressors are required to be located in the opposite direction from the blooie line and a minimum of 100 feet from the well bore. At the KMG locations, the air rig compressors are approximately 40 feet from the well bore and approximately 60 feet from the blooie line discharge due to the unique air rig design. The air compressors (see attachment) are located on the rig (1250 cfm) and

on a standby trailer (1170 cfm). A booster sits between the two compressors and boosts the output from 350 psi to 2000 psi. The design does put the booster and standby compressor opposite from the blooie line.

Lastly, Onshore Order 2 addresses the need for an automatic igniter or continuous pilot light on the blooie line. The air rig does not utilize an igniter as the surface hole drilling operation does not encounter productive formations.

Variance for FIT Requirements
KMG also respectfully requests a variance to Onshore Order 2, Section III, Part Bi, for the pressure integrity test (PIT, also known as a formation integrity test (FIT)). This well is not an exploratory well and is being drilled in an area where the formation integrity is well known. Additionally, when an FIT is run with the mud weight as required, the casing shoe frequently breaks down and causes subsequent lost circulation when drilling the entire depth of the well.

Conclusion
The air rig operating procedures and the attached air rig layout have effectively maintained well control while drilling the surface holes in KMG Fields. KMG respectfully requests a variance from Onshore Order 2 with respect to air drilling well control requirements as discussed above.

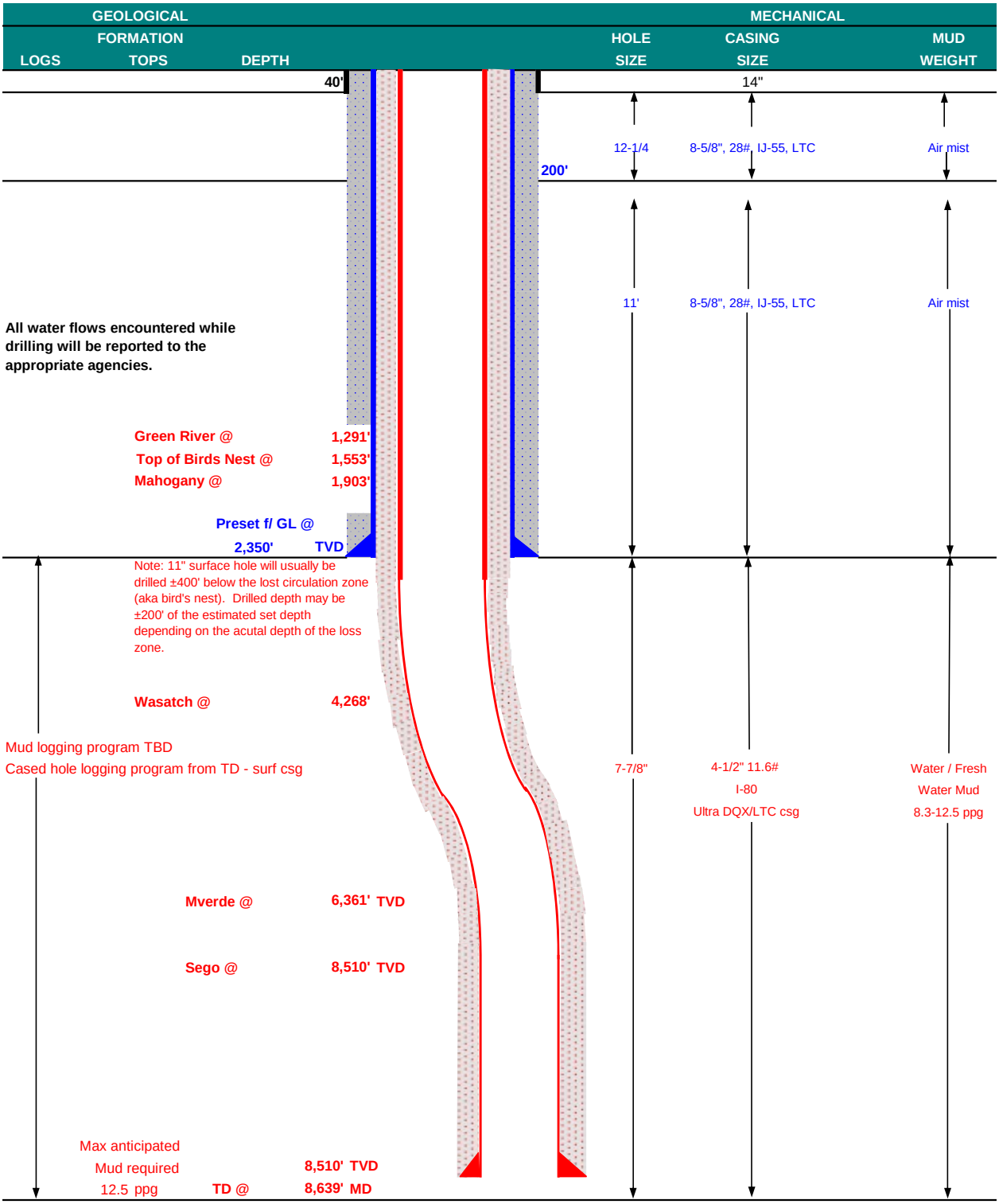
10. Other Information:

Please refer to the attached Drilling Program.

KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

COMPANY NAME	KERR-McGEE OIL & GAS ONSHORE LP		DATE	May 30, 2012	
WELL NAME	**BONANZA 1023-5L4AS**		TD	8,510' TVD	8,639' MD
FIELD	Natural Buttes	COUNTY Uintah	STATE Utah	FINISHED ELEVATION	5326.5
SURFACE LOCATION	NESW	1951 FSL	1965 FWL	Sec 5	T 10S R 23E
	Latitude:	39.976056	Longitude:	-109.353112	NAD 83
BTM HOLE LOCATION	NWSW	1865 FSL	1083 FWL	Sec 5	T 10S R 23E
	Latitude:	39.975818	Longitude:	-109.356258	NAD 83
OBJECTIVE ZONE(S)	Wasatch/Mesaverde				
ADDITIONAL INFO	Regulatory Agencies: BLM (Minerals), BLM (Surface), UDOGM Tri-County Health Dept.				



KERR-McGEE OIL & GAS ONSHORE LP

DRILLING PROGRAM

CASING PROGRAM

	SIZE	INTERVAL			WT.	GR.	CPLG.	DESIGN FACTORS BURST	COLLAPSE	LTC	DQX TENSION
CONDUCTOR	14"	0-40'									
								3,390	1,880	348,000	N/A
SURFACE	8-5/8"	0	to	2,350	28.00	IJ-55	LTC	2.30	1.71	6.04	N/A
								7,780	6,350	223,000	267,035
PRODUCTION	4-1/2"	0	to	5,000	11.60	I-80	DQX	1.11	1.15		3.29
								7,780	6,350	223,000	267,035
	4-1/2"	5,000	to	8,639'	11.60	I-80	LTC	1.11	1.15	6.53	

Surface Casing:

(Burst Assumptions: TD = 12.5 ppg) 0.73 psi/ft = frac gradient @ surface shoe

Fracture at surface shoe with 0.1 psi/ft gas gradient above

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

Production casing:

(Burst Assumptions: Pressure test with 8.4ppg @ 7000 psi) 0.64 psi/ft = bottomhole gradient

(Collapse Assumption: Fully Evacuated Casing, Max MW) (Tension Assumptions: Air Weight of Casing*Buoy.Fact. of water)

CEMENT PROGRAM

		FT. OF FILL	DESCRIPTION	SACKS	EXCESS	WEIGHT		YIELD
SURFACE	LEAD	500'	Premium cmt + 2% CaCl	180	60%	15.80		1.15
Option 1			+ 0.25 pps flocele					
	TOP OUT CMT (6 jobs)	1,200'	20 gals sodium silicate + Premium cmt	270	0%	15.80		1.15
			+ 2% CaCl + 0.25 pps flocele					
SURFACE			**NOTE: If well will circulate water to surface, option 2 will be utilized**					
Option 2	LEAD	1,850'	65/35 Poz + 6% Gel + 10 pps gilsonite	170	35%	11.00		3.82
			+ 0.25 pps Flocele + 3% salt BWOW					
	TAIL	500'	Premium cmt + 2% CaCl	150	35%	15.80		1.15
			+ 0.25 pps flocele					
	TOP OUT CMT	as required	Premium cmt + 2% CaCl	as req.		15.80		1.15
PRODUCTION	LEAD	3,759'	Premium Lite II +0.25 pps	300	35%	12.00		3.38
			celloflake + 5 pps gilsonite + 10% gel					
			+ 0.5% extender					
	TAIL	4,880'	50/50 Poz/G + 10% salt + 2% gel	1,150	35%	14.30		1.31
			+ 0.1% R-3					

*Substitute caliper hole volume plus 0% excess for LEAD if accurate caliper is obtained

*Substitute caliper hole volume plus 10% excess for TAIL if accurate caliper is obtained

FLOAT EQUIPMENT & CENTRALIZERS

SURFACE	Guide shoe, 1 jt, insert float. Centralize first 3 joints with bow spring centralizers. Thread lock guide shoe
PRODUCTION	Float shoe, 1 jt, float collar. 15 centralizers for a Mesaverde and 20 for a Blackhawk well. 1 centralizer on the first 3 joints and one every third joint thereafter.

ADDITIONAL INFORMATION

Test casing head to 750 psi after installing. Test surface casing to 1,500 psi prior to drilling out.

BOPE: 11" 5M with one annular and 2 rams. The BOPE will be installed before the production hole is drilled and tested to 5,000 psi (annular to 2,500 psi) prior to drilling out the surface casing shoe. Record on chart recorder and tour sheet. Function test rams on each trip. Maintain safety valve and inside BOP on rig floor at all times. Most rigs have top drives; however, if used, the Kelly is to be equipped with upper and lower kelly valves.

Surveys will be taken at 1,000' minimum intervals.

Most rigs have PVT System for mud monitoring. If no PVT is available, visual monitoring will be utilized.

DRILLING ENGINEER: _____ **DATE:** _____

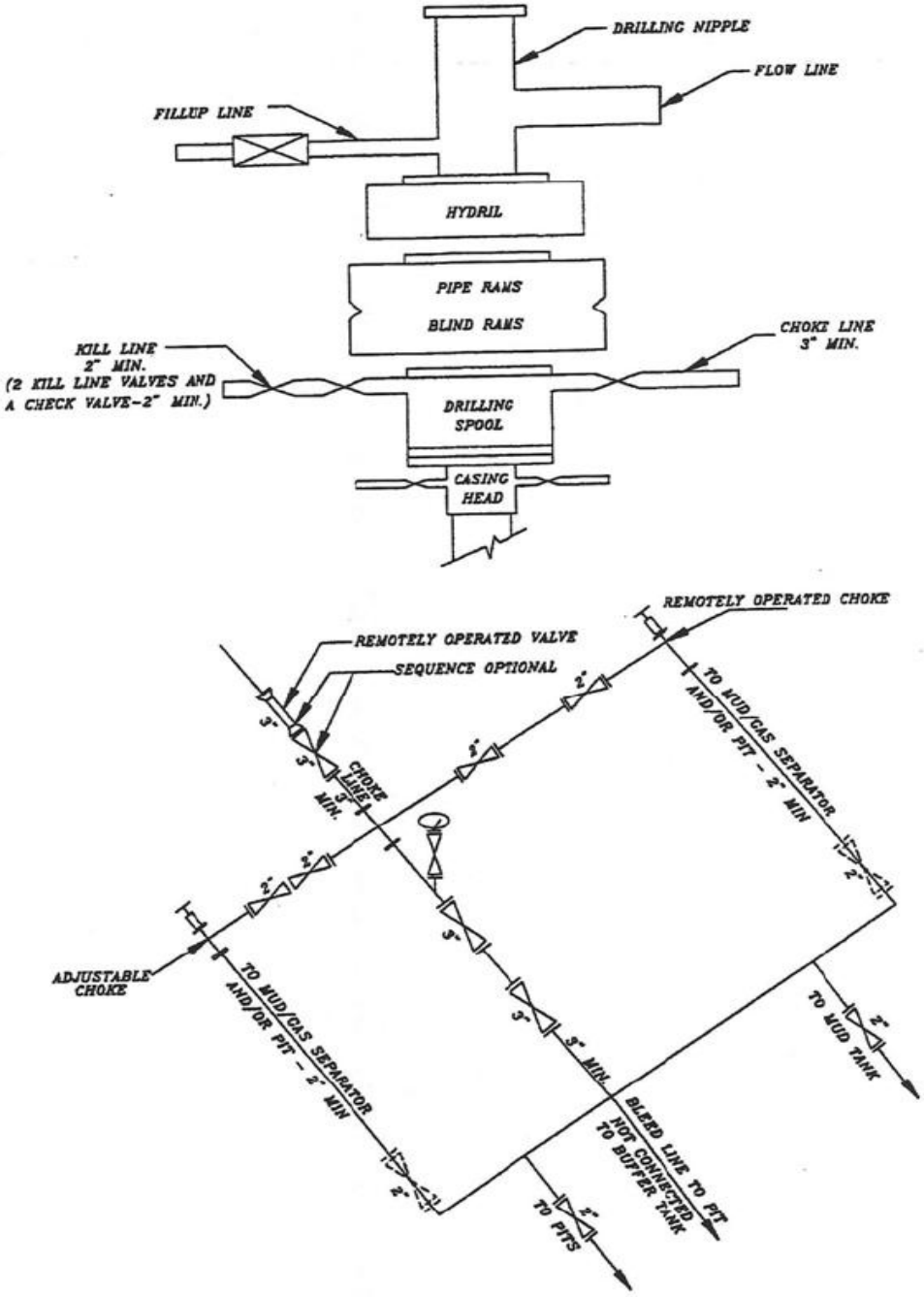
Nick Spence / Danny Showers / Chad Loesel

DRILLING SUPERINTENDENT: _____ **DATE:** _____

Kenny Gathings / Lovel Young

RECEIVED: May. 30, 2012

EXHIBIT A
BONANZA 1023-5L4AS



SCHEMATIC DIAGRAM OF 5,000 PSI BOP STACK

RECEIVED: May. 30, 2012

Requested Drilling Options:

Kerr-McGee will use either a closed loop drilling system that will require one pit and one cuttings storage area to be constructed on the drilling pad or a traditional drilling operation with one pit used for drilling and completion operations. The cuttings storage area will be used to contain only the de-watered drill cuttings and will be lined and bermed to prevent any liquid runoff. The drill cuttings will be buried in the completion pit once completion operations are completed according to traditional pit closure standards. The pit will be constructed to allow for completion operations. The completion operations pit will be lined with a synthetic material 20 mil or thicker and will be used for the completing of the wells on the pad or used as part of our Aandarko Completions Transportation System (ACTS). Using the closed loop drilling system will allow Kerr-McGee to decrease the amount of disturbance/footprint on location compared to a single large drilling/completions pit.

If Kerr-McGee does not use a closed loop drilling system, it will construct a traditional drilling/completions pit to contain drill cuttings and for use in completion operations. The pit will be lined with a synthetic material 20 mil or thicker. The drill cuttings will be buried in the pit using traditional pit closure standards.

RECEIVED: May. 30, 2012

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 6

ENTITY ACTION FORM

Operator: KERR McGEE OIL & GAS ONSHORE LP
Operator Account Number: N 2995
Address: P.O. Box 173779
city DENVER
state CO zip 80217
Phone Number: (720) 929-6304

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304752069	Bonanza 1023-5L4DS		NESW	5	10S	23E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
A	99999	18573	6/9/2012			6/20/2012	

Comments: MIRU TRIPLE A BUCKET RIG. WSMVD
SPUD WELL LOCATION ON 06/09/2012 AT 08:30 HRS. BHL: NWSW

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304752068	Bonanza 1023-5L4AS		NESW	5	10S	23E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
A	99999	18574	6/9/2012			6/20/2012	

Comments: MIRU TRIPLE A BUCKET RIG. WSMVD
SPUD WELL LOCATION ON 06/09/2012 AT 12:30 HRS. BHL: NWSW

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	

Comments:

ACTION CODES:
- **A** - Establish new entity for new well (single well only)
- **B** - Add new well to existing entity (group or unit well)
- **C** - Re-assign well from one existing entity to another existing entity
- **D** - Re-assign well from one existing entity to a new entity
- **E** - Other (Explain in 'comments' section)

JAIME SCHARNOWSKE
Name (Please Print)
Signature
REGULATORY ANALYST
Title
6/18/2012
Date

RECEIVED
JUN 18 2012
Div. of Oil, Gas & Mining

(5/2000)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU33433

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: BONANZA 1023-5L4AS

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047520680000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6526

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 1951 FSL 1965 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESW Section: 05 Township: 10.0S Range: 23.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ DRILLING REPORT Report Date: 6/27/2012	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

MIRU AIR RIG ON 6/25/2012. DRILLED SURFACE HOLE TO 2560'. RAN SURFACE CASING AND CEMENTED. WELL IS WAITING ON ROTARY RIG. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH WELL COMPLETION REPORT.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
July 02, 2012

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Cara Mahler	720 929-6029	Regulatory Analyst I
SIGNATURE N/A		**DATE** 6/29/2012

RECEIVED: Jun. 29, 2012

State of Utah - Notification Form

Operator KERR MCGEE OIL AND GAS Rig Name/# XTREME 12
Submitted By Jerry Barnes Phone Number 435- 828-0985
Well Name/Number BONANZA 1023-5L4AS
Qtr/Qtr NE/SW Section 5 Township 10S Range 23E
Lease Serial Number UTU-33433 CA-UTU-74473
API Number 43-047-52068

Casing – Time casing run starts, not cementing times.

☐ Production Casing
☐ Other

Date/Time ____ __ AM ☐ PM ☐

RECEIVED
AUG 0 1 2012
DIV. OF OIL, GAS & MINING

BOPE
☒ Initial BOPE test at surface casing point
☐ Other

Date/Time 8/2/2012 02:00 AM ☒ PM ☐

Rig Move
Location To: ___

Date/Time _____ _____ AM ☐ PM ☐

Remarks TIME IS ESTIMATED

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU33433

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: BONANZA 1023-5L4AS

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047520680000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6526

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 1951 FSL 1965 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESW Section: 05 Township: 10.0S Range: 23.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ DRILLING REPORT Report Date: 8/9/2012	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

MIRU ROTARY RIG. FINISHED DRILLING FROM 2560' TO 8659' ON 8/5/2012. RAN 4-1/2" 11.6# I-80 PRODUCTION CASING. CEMENTED PRODUCTION CASING. RELEASED XTREME 12 RIG ON 8/9/2012 @ 12:00 HRS. DETAILS OF CEMENT JOB WILL BE INCLUDED WITH THE WELL COMPLETION REPORT. WELL IS WAITING ON FINAL COMPLETION ACTIVITIES.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
August 10, 2012

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Cara Mahler	720 929-6029	Regulatory Analyst I
SIGNATURE N/A		**DATE** 8/10/2012

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU33433

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: PONDEROSA

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: BONANZA 1023-5L4AS

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047520680000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6526

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 1951 FSL 1965 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESW Section: 05 Township: 10.0S Range: 23.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ DRILLING REPORT Report Date: 10/2/2012	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

No Activity for the month of September 2012. Well TD at 8,659.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
October 02, 2012

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Lindsey Frazier	720 929-6857	Regulatory Analyst II
SIGNATURE N/A		**DATE** 10/2/2012

RECEIVED: Oct. 02, 2012

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU33433

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: PONDEROSA

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: BONANZA 1023-5L4AS

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047520680000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6526

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 1951 FSL 1965 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESW Section: 05 Township: 10.0S Range: 23.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ DRILLING REPORT Report Date: 11/5/2012	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Started completing the well. Well TD at 8,659.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
November 05, 2012

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Jaime Scharnowske	720 929-6304	Regulartory Analyst
SIGNATURE N/A		**DATE** 11/5/2012

RECEIVED: Nov. 05, 2012

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 6

ENTITY ACTION FORM

Operator: KERR McGEE OIL & GAS ONSHORE LP
Operator Account Number: N 2995
Address: P.O. Box 173779
city DENVER
state CO zip 80217
Phone Number: (720) 929-6304

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
Various	Ponderosa Wells						UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
	18421	19519				5/1/2012	

Comments: Move the attached wells into the Ponderosa unit. All wells are WSMVD. 11/16/2012

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	

Comments:

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	

Comments:

ACTION CODES:

- **A** - Establish new entity for new well (single well only)
- **B** - Add new well to existing entity (group or unit well)
- **C** - Re-assign well from one existing entity to another existing entity
- **D** - Re-assign well from one existing entity to a new entity
- **E** - Other (Explain in 'comments' section)

JAIME SCHARNOWSKE
Name (Please Print)
Signature
REGULATORY ANALYST 11/8/2012
Title **Date**

RECEIVED
NOV 08 2012
Div. of Oil, Gas & Mining

(5/2000)

Well Name	Quarter/Quarter	Section	Township	Range	APUI Number	County	New Entity Number	Formation
BONANZA 1023-6J2AS	NESW	6	10S	23E	4304751465	Uintah	18519	WSMVD
BONANZA 1023-6K1CS	NESW	6	10S	23E	4304751466	Uintah	18519	WSMVD
BONANZA 1023-6K2BS	NESW	6	10S	23E	4304751467	Uintah	18519	WSMVD
BONANZA 1023-6K2CS	NESW	6	10S	23E	4304751468	Uintah	18519	WSMVD
BONANZA 1023-6L2AS	NESW	6	10S	23E	4304751469	Uintah	18519	WSMVD
BONANZA 1023-6L2DS	NESW	6	10S	23E	4304751470	Uintah	18519	WSMVD
BONANZA 1023-6O1BS	SWSE	6	10S	23E	4304751473	Uintah	18519	WSMVD
BONANZA 1023-6O2DS	SWSE	6	10S	23E	4304751474	Uintah	18519	WSMVD
BONANZA 1023-6O3AS	SWSE	6	10S	23E	4304751475	Uintah	18519	WSMVD
BONANZA 1023-6P2BS	SWSE	6	10S	23E	4304751476	Uintah	18519	WSMVD
BONANZA 1023-6P3CS	SWSE	6	10S	23E	4304751478	Uintah	18519	WSMVD
BONANZA 1023-5J2DS	NESW	5	10S	23E	4304752063	Uintah	18519	WSMVD
BONANZA 1023-5K1BS	NESW	5	10S	23E	4304752064	Uintah	18519	WSMVD
BONANZA 1023-5K1CS	NESW	5	10S	23E	4304752065	Uintah	18519	WSMVD
BONANZA 1023-5K3DS	NESW	5	10S	23E	4304752066	Uintah	18519	WSMVD
BONANZA 1023-5L1DS	NESW	5	10S	23E	4304752067	Uintah	18519	WSMVD
BONANZA 1023-5L4AS	NESW	5	10S	23E	4304752068	Uintah	18519	WSMVD
BONANZA 1023-5L4DS	NESW	5	10S	23E	4304752069	Uintah	18519	WSMVD
BONANZA 1023-5O2AS	NESW	5	10S	23E	4304752070	Uintah	18519	WSMVD
BONANZA 1023-5E3BS	SWNW	5	10S	23E	4304752071	Uintah	18519	WSMVD
BONANZA 1023-5E3CS	SWNW	5	10S	23E	4304752072	Uintah	18519	WSMVD
BONANZA 1023-5L1AS	SWNW	5	10S	23E	4304752073	Uintah	18519	WSMVD
BONANZA 1023-5L3BS	SWNW	5	10S	23E	4304752074	Uintah	18519	WSMVD
BONANZA 1023-5M1AS	SWSW	5	10S	23E	4304752075	Uintah	18519	WSMVD
BONANZA 1023-5M1CS	SWSW	5	10S	23E	4304752076	Uintah	18519	WSMVD
BONANZA 1023-5M3BS	SWSW	5	10S	23E	4304752077	Uintah	18519	WSMVD
BONANZA 1023-5M3CS	SWSW	5	10S	23E	4304752078	Uintah	18519	WSMVD
BONANZA 1023-5N3CS	SWSW	5	10S	23E	4304752079	Uintah	18519	WSMVD
BONANZA 1023-5O4BS	SESE	5	10S	23E	4304752082	Uintah	18519	WSMVD
BONANZA 1023-5P1AS	SESE	5	10S	23E	4304752083	Uintah	18519	WSMVD
BONANZA 1023-5P1CS	SESE	5	10S	23E	4304752084	Uintah	18519	WSMVD
BONANZA 1023-5P4CS	SESE	5	10S	23E	4304752085	Uintah	18519	WSMVD
BONANZA 1023-5C4AS	NENW	5	10S	23E	4304752089	Uintah	18519	WSMVD
BONANZA 1023-5F2CS	NENW	5	10S	23E	4304752090	Uintah	18519	WSMVD
BONANZA 1023-5F3AS	NENW	5	10S	23E	4304752091	Uintah	18519	WSMVD
BONANZA 1023-5C2CS	NWNW	5	10S	23E	4304752092	Uintah	18519	WSMVD
BONANZA 1023-5D2DS	NWNW	5	10S	23E	4304752093	Uintah	18519	WSMVD
BONANZA 1023-5D3AS	NWNW	5	10S	23E	4304752094	Uintah	18519	WSMVD
BONANZA 1023-5E2AS	NWNW	5	10S	23E	4304752095	Uintah	18519	WSMVD
BONANZA 1023-6A1CS	NWNW	5	10S	23E	4304752096	Uintah	18519	WSMVD
BONANZA 1023-6I3AS	SWNW	5	10S	23E	4304752387	Uintah	18519	WSMVD
BONANZA 11-2	SWNW	11	10S	23E	4304734773	Uintah	18519	WSMVD
BONANZA 1023-6E4AS	SENW	6	10S	23E	4304751453	Uintah	18519	WSMVD
BONANZA 1023-6F1AS	SENW	6	10S	23E	4304751454	Uintah	18519	WSMVD
BONANZA 1023-6F1CS	SENW	6	10S	23E	4304751455	Uintah	18519	WSMVD
BONANZA 1023-6F4CS	SENW	6	10S	23E	4304751456	Uintah	18519	WSMVD
BONANZA 1023-6G2AS	SENW	6	10S	23E	4304751457	Uintah	18519	WSMVD
BONANZA 1023-6G4CS	SENW	6	10S	23E	4304751458	Uintah	18519	WSMVD
BONANZA 1023-6A3DS	SENE	6	10S	23E	4304751459	Uintah	18519	WSMVD
BONANZA 1023-6G1DS	SENE	6	10S	23E	4304751460	Uintah	18519	WSMVD
BONANZA 1023-6H1BS	SENE	6	10S	23E	4304751461	Uintah	18519	WSMVD
BONANZA 1023-6H2CS	SENE	6	10S	23E	4304751462	Uintah	18519	WSMVD
BONANZA 1023-6I2AS	SENE	6	10S	23E	4304751463	Uintah	18519	WSMVD
BONANZA 1023-6I3DS	SWSE	6	10S	23E	4304751471	Uintah	18519	WSMVD
BONANZA 1023-6J4AS	SWSE	6	10S	23E	4304751472	Uintah	18519	WSMVD
BONANZA 1023-6P3AS	SWSE	6	10S	23E	4304751477	Uintah	18519	WSMVD

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5.LEASE DESIGNATION AND SERIAL NUMBER: UTU33433

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: PONDEROSA

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: BONANZA 1023-5L4AS

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047520680000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6526

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 1951 FSL 1965 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESW Section: 05 Township: 10.0S Range: 23.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ DRILLING REPORT Report Date: 12/3/2012	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Started completing the well. Well TD at 8,659.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
December 03, 2012

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Jaime Scharnowske	720 929-6304	Regulartory Analyst
SIGNATURE		**DATE**
N/A		12/3/2012

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

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6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME: PONDEROSA

1. TYPE OF WELL Gas Well

8. WELL NAME and NUMBER: BONANZA 1023-5L4AS

2. NAME OF OPERATOR: KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER: 43047520680000

3. ADDRESS OF OPERATOR: P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER: 720 929-6526

9. FIELD and POOL or WILDCAT: NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 1951 FSL 1965 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NESW Section: 05 Township: 10.0S Range: 23.0E Meridian: S

COUNTY: UINTAH

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ DRILLING REPORT Report Date: 12/4/2012	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	✓ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The subject well was placed on production on 12/04/2012. The Chronological Well History will be submitted with the well completion report.

Accepted by the Utah Division of Oil, Gas and Mining
FOR RECORD ONLY
December 06, 2012

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Lindsey Frazier	720 929-6857	Regulatory Analyst II
SIGNATURE N/A		**DATE** 12/6/2012

RECEIVED: Dec. 06, 2012

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER:
UTU33433

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:
PONDEROSA

1. TYPE OF WELL
Gas Well

8. WELL NAME and NUMBER:
BONANZA 1023-5L4AS

2. NAME OF OPERATOR:
KERR-MCGEE OIL & GAS ONSHORE, L.P.

9. API NUMBER:
43047520680000

3. ADDRESS OF OPERATOR:
P.O. Box 173779 1099 18th Street, Suite 600, Denver, CO, 80217 3779

PHONE NUMBER:
720 929-6526

9. FIELD and POOL or WILDCAT:
NATURAL BUTTES

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
1951 FSL 1965 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NESW Section: 05 Township: 10.0S Range: 23.0E Meridian: S

COUNTY:
UINTAH

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☐ NOTICE OF INTENT Approximate date work will start:	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
☐ SPUD REPORT Date of Spud:	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
✓ DRILLING REPORT Report Date: 1/3/2013	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	☐ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.
Well was completed, finishing well completion report. Well TD at 8,659

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
January 04, 2013

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Laura Abrams	720 929-6356	Regulatory Analyst II
SIGNATURE		**DATE**
N/A		1/3/2013

RECEIVED: Jan. 03, 2013

C

FORM 6

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

ENTITY ACTION FORM

Operator: KERR McGEE OIL & GAS ONSHORE LP

Operator Account Number: N 2995

Address: P.O. Box 173779

city DENVER

state CO zip 80217

Phone Number: (720) 929-6857

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304751381	NBU 921-35P1CS		SESE	35	9S	21E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
E	18241	2900	4/23/2011			4/13/12	

Comments: This well is completed in the Wasatch and Mesaverde formations.

Add to NBU 1/31/13

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304752067	BONANZA 1023-5L1DS		NESW	5	10S	23E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
E	18575	18519	6/8/2012			12/3/12	

Comments: This well is completed in the Wasatch and Mesaverde formations.

WSMVD

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
4304752068	BONANZA 1023-5L4AS		NESW	5	10S	23E	UINTAH
Action Code	**Current Entity Number**	**New Entity Number**	**Spud Date**			**Entity Assignment Effective Date**	
E	18519	18519	6/9/2012			12/4/12	

Comments: This well is completed in the Wasatch and Mesaverde formations.

WSMVD 1/31/13

ACTION CODES:

- **A** - Establish new entity for new well (single well only)
- **B** - Add new well to existing entity (group or unit well)
- **C** - Re-assign well from one existing entity to another existing entity
- **D** - Re-assign well from one existing entity to a new entity
- **E** - Other (Explain in 'comments' section)

Lindsey Frazier
Name (Please Print)

Signature

REGULATORY ANALYST II
Title

1/31/2013
Date

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JAN 31 2013
Div. of Oil, Gas & Mining

(5/2000)

Form 3160-4
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

5. Lease Serial No. UTU33433

1a. Type of Well ☐ Oil Well ☒ Gas Well ☐ Dry ☐ Other
b. Type of Completion ☒ New Well ☐ Work Over ☐ Deepen ☐ Plug Back ☐ Diff. Resvr.
Other

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No. UTU88209A

2. Name of Operator KERR MCGEE OIL & GAS ONSHORE LP — Contact: LINDSEY A FRAZIER — E-Mail: lindsey.frazier@anadarko.com

8. Lease Name and Well No. BONANZA 1023-5L4AS

3. Address PO BOX 173779 DENVER, CO 80217

3a. Phone No. (include area code) Ph: 720-929-6857

9. API Well No. 43-047-52068

4. Location of Well (Report location clearly and in accordance with Federal requirements)*

At surface NESW 1951FSL 1965FWL 39.976056 N Lat, 109.353112 W Lon

At top prod interval reported below NWSW 1871FSL 1083FWL

At total depth NWSW 1858FSL 1064FWL BHL by HSM

10. Field and Pool, or Exploratory NATURAL BUTTES

11. Sec., T., R., M., or Block and Survey or Area Sec 5 T10S R23E Mer SLB

12. County or Parish UINTAH — 13. State UT

14. Date Spudded 06/09/2012

15. Date T.D. Reached 08/05/2012

16. Date Completed ☐ D & A ☒ Ready to Prod. 12/04/2012

17. Elevations (DF, KB, RT, GL)* 5342 KB

18. Total Depth: MD 8659 TVD 8522

19. Plug Back T.D.: MD 8595 TVD 8458

20. Depth Bridge Plug Set: MD TVD

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)
CBL/GR/CCL/TEMP-BHV-TRIPLE COMBO

22. Was well cored? ☒ No ☐ Yes (Submit analysis)
Was DST run? ☒ No ☐ Yes (Submit analysis)
Directional Survey? ☐ No ☒ Yes (Submit analysis)

23. Casing and Liner Record *(Report all strings set in well)*

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
20.000	14.000 STL	36.7	0	40		28			
11.000	8.625 IJ-55	28.0	0	2538		575		0	
7.875	4.500 I-80	11.6	0	8642		1503		2610	

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2.375	7857							

25. Producing Intervals — 26. Perforation Record

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) MESAVERDE	7082	8391	7082 TO 8391	0.360	144	OPEN
B)						
C)						
D)						

27. Acid, Fracture, Treatment, Cement Squeeze, Etc.

Depth Interval	Amount and Type of Material
7082 TO 8391	PUMP 6,831 BBLS SLICK H2O AND 140,573 LBS 30/50 OTTAWA SAND

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
12/04/2012	12/05/2012	24	→	0.0	2133.0	0.0			FLOWS FROM WELL

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
20/64	1680	2346.0	→	0	2133	0		PGW

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status
			→					

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JAN - 2 2013
DIV. OF OIL, GAS & MINING

(See Instructions and spaces for additional data on reverse side)

ELECTRONIC SUBMISSION #171866 VERIFIED BY THE BLM WELL INFORMATION SYSTEM

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production →	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method

Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate →	Oil BBL	Gas MCF	Water BBL	Gas:Oil Ratio	Well Status

29. Disposition of Gas *(Sold, used for fuel, vented, etc.)*
SOLD

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top Meas. Depth
				GREEN RIVER	1189
				BIRD'S NEST	1493
				MAHOGANY	1973
				WASATCH	4409
				MESAVERDE	6487

32. Additional remarks (include plugging procedure):
The first 210? of the surface hole was drilled with a 12 ?? bit. The remainder of surface hole was drilled with an 11? bit. DQX csg was run from surface to 5003?; LTC csg was run from 5003? to 8642?. Attached is the chronological well history, perforation report & final survey.

33. Circle enclosed attachments:

1. Electrical/Mechanical Logs (1 full set req'd.)
2. Geologic Report
3. DST Report
4. Directional Survey
5. Sundry Notice for plugging and cement verification
6. Core Analysis
7 Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions):

Electronic Submission #171866 Verified by the BLM Well Information System.
For KERR MCGEE OIL & GAS ONSHORE L, sent to the Vernal

Name *(please print)* LINDSEY A FRAZIER Title REGUALTORY ANALYST

Signature (Electronic Submission) Date 12/27/2012

RECEIVED
JAN - 2 2013
DIV. OF OIL, GAS & MINING

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fradulent statements or representations as to any matter within its jurisdiction.

**** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ** ORIGINAL ****

US ROCKIES REGION

Operation Summary Report

Well: BONANZA 1023-5L4AS WHITE		Spud Date: 6/25/2012	
Project: UTAH-UINTAH	Site: BONANZA 1023-5K PAD		Rig Name No: PROPETRO 12/12, XTC 12/12
Event: DRILLING	Start Date: 6/5/2012		End Date: 8/9/2012
Active Datum: RKB @5,342.00usft (above Mean Sea Level)	UWI: NE/SW/0/10/S/23/E/5/0/0/26/PM/S/1951/W/0/1965/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
6/25/2012	7:00 - 11:00	4.00	DRLSUR	08	A	Z		***FAILURE RIG: WAIT ON RIG 10 FROM YARD TO REPLACE RIG 12 DUE TO MECHANICAL PROBLEMS
	11:00 - 14:00	3.00	DRLSUR	01	B	P		RIG UP ON LAST WELL OF PAD
	14:00 - 15:30	1.50	DRLSUR	02	C	P		SPUD 06/25/ 2012 14:00 hrs. DRILL 12.25" HOLE 44 ft TO 210 ft (166 FT, 111 FPH). WOB 5-15 Kips. GPM 491. PSI ON/OFF 600/400. SURFACE RPM 55, MOTOR 83, TOTAL RPM 138. UP/DOWN/ ROT 20/20/20 K. DRAG 0 Kips . CIRCULATE CLOSED LOOP SYSTEM DRILL DOWN TO 210 ft W/6 in COLLARS.
	15:30 - 18:30	3.00	DRLSUR	08	A	Z		***FAILURE SWIVEL PACKING: CHANGE OUT SWIVEL PACKING
	18:30 - 20:00	1.50	DRLSUR	06	A	P		PICK UP 11" BIT AND ALL DIRECTIONAL TOOLS INSTALL EM TOOL AND ORIENT TO MUD MOTOR TRIP IN HOLE
	20:00 - 0:00	4.00	DRLSUR	02	C	P		DRILL 11" SURFACE HOLE 210 - 680' (470' AT 117 FT HR) WEIGHT ON BIT 15-25 K. STROKES PER MINUTE 120 GALLONS PER MINUTE 491. PRESSURE ON/OFF(BOTTOM) 1090/880. ROTARY RPM 55, MOTOR RPM 83, TOTAL RPM 138. UP/DOWN/ ROTATE 68/54/60 K. DRAG 20 K. SLIDING 12' - 20' PER 90'OF ROTATION GETTING 1.8 DEGREE BUILD RATES CIRCULATE CLOSED LOOP SYSTEM WITH 8.6# WATER. RUNNING VOLUME OVER BOTH SHAKERS 200 API SCREENS ON SHAKERS NO HOLE ISSUES

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Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
6/26/2012	0:00 - 21:00	21.00	DRLSUR	02	C	P		DRILL 11" SURFACE HOLE 680' - 2550' (1870' AT 89 FT HR) WEIGHT ON BIT 15-25 K. STROKES PER MINUTE 120 GALLONS PER MINUTE 491. PRESSURE ON/OFF(BOTTOM) 1090/880. ROTARY RPM 55, MOTOR RPM 83, TOTAL RPM 138. UP/DOWN/ ROTATE 80/60/70 K. DRAG 20 K. SLIDING 12' - 20' PER 90'OF ROTATION GETTING 1.8 DEGREE BUILD RATES LANDED 5' HIGH 2' LEFT SLIDING 16% CIRCULATE CLOSED LOOP SYSTEM WITH 8.6# WATER. RUNNING VOLUME OVER BOTH SHAKERS 200 API SCREENS ON SHAKERS NO HOLE ISSUES
	21:00 - 23:30	2.50	DRLSUR	05	C	P		CIRCULATE AND CONDITION MUD PRIOR TO LDDS
	23:30 - 0:00	0.50	DRLSUR	06	A	P		BEGIN LDDS WITH BROKEN WENCH LINE ONLY USING ONE
6/27/2012	0:00 - 0:30	0.50	DRLSUR	08	A	Z		*** FAILURE WENCH LINE
	0:30 - 5:30	5.00	DRLSUR	06	A	P		TRIP OUT OF HOLE LAYING DOWN DRILL STRING. BRAK OUT EM TOOLS DIRECTIONAL MONELS MUD MOTOR AND BIT
	5:30 - 7:00	1.50	DRLSUR	12	A	P		RIG UP TO RUN CASING, THIGHT QUARTERS MADE THIS SLOWER
	7:00 - 9:00	2.00	DRLSUR	12	C	P		RIG UP AND RUN 57 JOINT 8.625 28# J55 SURFACE CASING SHOE AT 2525' BAFFLE AT 2481' NO PROBLEMS GETTING CASING TO BOTTOM
	9:00 - 12:00	3.00	DRLSUR	12	E	P		PRESSURE TEST LINES TO 2000 PSI. PUMP 135 BBLS OF WATER AHEAD. CATCH PSI. PUMP 20 BBLS OF 8.3# GEL WATER AHEAD. MIX AND PUMP (300 SX) 61.4 BBLS OF 15.8# 1.15 YD 5 GAL/SK PREMIUM CEMENT W/ 2% CALC. DROP PLUG ON FLY. DISPLACE W/ 143 BBLS OF H20. NO CIRC THROUGH OUT. FINAL LIFT OF 210 PSI AT 4 BBL/MIN. BUMP PLUG WITH 500 PSI FOR 5 MIN. FLOAT HELD. MIX AND PUMP (150 SX) 30.7 BBLS OF SAME TAIL CEMENT W/ 4% CALC. DOWN BACKSIDE, NO CEMENT TO SURFACE. SHUT DOWN AND CLEAN TRUCK. WAIT 1.5 HOURS MIX AND PUMP (125 SX) 22.4 BBLS OF SAME TAIL CEMENT W/ 4% CALC. DOWN BACKSIDE NO CEMENT TO SURFACE. NO CEMENT TO SURFACE. SHUT DOWN AND CLEAN TRUCK. WILL TOP OUT ON NEXT JOB RELEASE RIG AT 12:00
8/2/2012	3:00 - 4:00	1.00	MIRU	02	C	P		SKID THE RIG 20' TO THE BONANZA 1023-5L4AS
	4:00 - 4:30	0.50	MIRU	01	B	P		RIG UP THE CATWALK AND FLOWLINE
	4:30 - 5:00	0.50	MIRU	14	A	P		NIPPLED UP THE BOP AND CHOKE MANIFOLD

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	5:00 - 10:00	5.00	MIRU	15	A	P		HOLD SAFETY MEETING. TEST TOP DRIVE VALVE, I-BOP VALVE, FLOOR VALVE, DART VALVE, PIPE AND BLIND RAMS, INSIDE AND OUTSIDE KILL LINE VALVES INSIDE CHOKE LINE VALVE, HCR VALVE, CHOKE LINE, CHOKE MANIFOLD VALVES AND CHOKES TO 5000 PSI FOR 10 MINUTES AND 250 PSI FOR 5 MINUTES. TEST ANNULLAR TO 2500 PSI FOR 10 MIN AND 250 PSI FOR 5 MINUTES. TESTING CASING TO 1500 PSI FOR 30 MINUTES.
	10:00 - 10:30	0.50	MIRU	14	B	P		INSTALLED THE WEAR BUSHING
	10:30 - 13:00	2.50	PRPSPD	06	A	P		PICKED UP AND SCRIBED THE DIRECTIONAL ASSEMBLY AND TRIPPED IN THE HOLE WITH THE BHA.
	13:00 - 13:30	0.50	PRPSPD	14	B	P		INSTALLED THE DRILLING RUBBER
	13:30 - 14:30	1.00	PRPSPD	09	A	P		CUT AND SLIPPED 52' OF DRILLING LINE
	14:30 - 16:00	1.50	PRPSPD	06	A	P		TRIPPED IN THE HOLE WITH DRILL PIPE AND TAGGED CEMENT AT 2380'
	16:00 - 17:30	1.50	DRLPRC	02	F	P		DRILLED THE CEMENT AND FLOAT EQUIPMENT 100 STROKES ON THE PUMP / 450 GPM 40 RPM ROTARY / 72 RPM MOTOR 10-15K WEIGHT ON THE BIT
	17:30 - 18:00	0.50	DRLPRC	07	A	P		RIG SERVICE
	18:00 - 0:00	6.00	DRLPRC	02	D	P		DRILL SLIDE 2571' - 3222' (651',108.5'/HR) WEIGHT ON BIT 19-23K. AVERAGE WEIGHT ON BIT 21K. ROTARY RPM 55. MUD MOTOR RPM 83. STROKES PER MINUTE 115 GALLONS PER MINUTE 517. ON/OFF PSI 1200/950. DIFFERENTIAL 250. TORQUE HIGH/LOW 7600/5200. OFF BOTTOM TORQUE 4500 STRING WEIGHT UP/DOWN/ROT 80/60/70. DRAG 10K. BIT POSITION : 3218' 12' S & 2' E OF CENTER SLIDE 86' AT 51.5'/HR. SLIDE 26.09% ROTATE 73.91%. RUNNING 2 CENTRIFUGES AND DE WATERING.(WT 8.4 VIS 26.) USED 36 BBLS DRILL WATER FOR HOLE VOLUME. LOSS 40 BBLS DRILL WATER INTO FORMATION. (LOSING 7 BBLS HR) PUMP 5% LCM SWEEPS TO HELP WITH LOSSES. (ADD 40 BBLS OF 32 VIS DRILL WATER TO PITS FOR SWEEPS) ADDING POLYMER TO SYSTEM HELP STABALIZE SHALES. NO FLARE

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Project: UTAH-UINTAH	Site: BONANZA 1023-5K PAD		Rig Name No: PROPETRO 12/12, XTC 12/12
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8/3/2012	0:00 - 5:30	5.50	DRLPRC	02	D	P		DRILL SLIDE 3222'-3857' (635',115.5'/HR) WEIGHT ON BIT 19-23K. AVERAGE WEIGHT ON BIT 21K. ROTARY RPM 55. MUD MOTOR RPM 83. STROKES PER MINUTE 115 GALLONS PER MINUTE 517. ON/OFF PSI 1260/1000. DIFFERENTIAL 260. TORQUE HIGH/LOW 7800/5500. OFF BOTTOM TORQUE 4800 STRING WEIGHT UP/DOWN/ROT 100/70/80. DRAG 20K. BIT POSITION : 17.9' N & 7.9' W OF CENTER SLIDE 62' AT 53'/HR. SLIDE 20.29% ROTATE 79.71%. RUNNING 2 CENTRIFUGES AND DE WATERING.(WT 8.4 VIS 26.) USED 36 BBLS DRILL WATER FOR HOLE VOLUME. LOSS 130 BBLS DRILL WATER INTO FORMATION. (LOSING 23 BBLS HR) PUMP CALCIUM CARBONATE/ LCM SWEEPS TO HELP WITH LOSSES. (ADD 130 BBLS OF 32 VIS DRILL WATER TO PITS FOR SWEEPS) ADDING POLYMER TO SYSTEM HELP STABILIZE SHALES. NO FLARE
	5:30 - 6:00	0.50	DRLPRC	07	A	P		RIG SERVICE
	6:00 - 17:00	11.00	DRLPRC	02	D	P		DRILL SLIDE 3857'- 5081' (1224',115.5'/HR) WEIGHT ON BIT 19-23K. AVERAGE WEIGHT ON BIT 21K. ROTARY RPM 55. MUD MOTOR RPM 83. STROKES PER MINUTE 115 GALLONS PER MINUTE 517. ON/OFF PSI 2000/1560. DIFFERENTIAL 260. TORQUE HIGH/LOW 9000/7000. OFF BOTTOM TORQUE 5700 STRING WEIGHT UP/DOWN/ROT 135/80/100. DRAG 35K. BIT POSITION : 9.6' N & 20.4' W OF CENTER SLIDE 62' AT 53'/HR. SLIDE 13.14% ROTATE 86.86%. RUNNING 2 CENTRIFUGES AND DE WATERING.(WT 8.4 VIS 26.) USED 66 BBLS DRILL WATER FOR HOLE VOLUME. LOSS 97 BBLS DRILL WATER INTO FORMATION. (LOSING 8.8 BBLS HR) PUMP CALCIUM CARBONATE/ LCM SWEEPS TO HELP WITH LOSSES. (ADD 150 BBLS OF 32 VIS DRILL WATER TO PITS FOR SWEEPS AND MAKE UP WATER) ADDING POLYMER TO SYSTEM HELP STABILIZE SHALES. NO FLARE
	17:00 - 17:30	0.50	DRLPRC	07	A	P		RIG SERVICE

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	17:30 - 0:00	6.50	DRLPRC	02	D			DRILL SLIDE 5081'- 5720' (639',98.3'/HR) WEIGHT ON BIT 18-24K. AVERAGE WEIGHT ON BIT 21K. ROTARY RPM 55. MUD MOTOR RPM 79. STROKES PER MINUTE 110 GALLONS PER MINUTE 495. ON/OFF PSI 1680/1380. DIFFERENTIAL 300. TORQUE HIGH/LOW 9700/7500. OFF BOTTOM TORQUE 5700 STRING WEIGHT UP/DOWN/ROT 170/100/140. DRAG 35K. BIT POSITION : 13.4' N & 8.2' W OF CENTER SLIDE 50' AT 35'/HR. SLIDE 21.52% ROTATE 78.48%. RUNNING 2 CENTRIFUGES AND DE WATERING.(WT 8.4 VIS 26.) USED 36 BBLS DRILL WATER FOR HOLE VOLUME. LOSS 60 BBLS DRILL WATER INTO FORMATION. (LOSING 9 BBLS HR) PUMP CALCIUM CARBONATE/ LCM SWEEPS TO HELP WITH LOSSES. (ADD 130 BBLS OF 32 VIS DRILL WATER TO PITS FOR SWEEPS) ADDING POLYMER TO SYSTEM HELP STABILIZE SHALES. NO FLARE
8/4/2012	0:00 - 5:30	5.50	DRLPRC	02	D	P		DRILL SLIDE 5720' - 6305' (585 ',106.3'/HR) WEIGHT ON BIT 18-24K. AVERAGE WEIGHT ON BIT 21K. ROTARY RPM 55. MUD MOTOR RPM 79. STROKES PER MINUTE 110 GALLONS PER MINUTE 495. ON/OFF PSI 1680/1380. DIFFERENTIAL 300. TORQUE HIGH/LOW 9700/7500. OFF BOTTOM TORQUE 5700 STRING WEIGHT UP/DOWN/ROT 140/100/120. DRAG 20K. BIT POSITION : 6210' 18'N 15' W OF CENTER SLIDE 12' AT 28'/HR. SLIDE 2.05% ROTATE 97.95%. RUNNING 2 CENTRIFUGES AND DE WATERING.(WT 8.4 VIS 26.) USED 33 BBLS DRILL WATER FOR HOLE VOLUME. LOSS 92 BBLS DRILL WATER INTO FORMATION. (LOSING 16.7 BBLS HR) PUMP CALCIUM CARBONATE/ LCM SWEEPS TO HELP WITH LOSSES. (ADD 145 BBLS OF FRESH WATER TO PITS FOR VOLUME AND SWEEPS) ADDING POLYMER TO SYSTEM HELP STABILIZE SHALES. NO FLARE
	5:30 - 6:00	0.50	DRLPRC	07	A	P		RIG SERVICE

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	6:00 - 16:30	10.50	DRLPRC	02	D	P		DRILL SLIDE 6305'- 7211' (906 ',86.3'/HR) WEIGHT ON BIT 18-24K. AVERAGE WEIGHT ON BIT 21K. ROTARY RPM 55. MUD MOTOR RPM 79. STROKES PER MINUTE 110 GALLONS PER MINUTE 495. ON/OFF PSI 2130/1800. DIFFERENTIAL 330. TORQUE HIGH/LOW 11600/9200. OFF BOTTOM TORQUE 6800 STRING WEIGHT UP/DOWN/ROT 140/100/120. DRAG 20K. BIT POSITION : 7116' 6'N 1' W OF CENTER SLIDE 76' AT 31.4'/HR. SLIDE 23.77% ROTATE 76.23%. RUNNING 2 CENTRIFUGES AND DE WATERING.(WT 8.4 VIS 26.) USED 33 BBLS DRILL WATER FOR HOLE VOLUME. LOSS 92 BBLS DRILL WATER INTO FORMATION. (LOSING 16.7 BBLS HR) PUMP CALCIUM CARBONATE/ LCM SWEEPS TO HELP WITH LOSSES. (ADD 145 BBLS OF FRESH WATER TO PITS FOR VOLUME AND SWEEPS) ADDING POLYMER TO SYSTEM HELP STABILIZE SHALES. NO FLARE
	16:30 - 17:00	0.50	DRLPRC	07	A	P		RIG SERVICE
	17:00 - 0:00	7.00	DRLPRC	02	D	P		DRILL SLIDE 7211'- 7710' (499 ',71'/HR) WEIGHT ON BIT 18-24K. AVERAGE WEIGHT ON BIT 21K. ROTARY RPM 55. MUD MOTOR RPM 79. STROKES PER MINUTE 110 GALLONS PER MINUTE 495. ON/OFF PSI 2130/1900. DIFFERENTIAL 230. TORQUE HIGH/LOW 13200/9400. OFF BOTTOM TORQUE 7500 STRING WEIGHT UP/DOWN/ROT 190/150/110. DRAG 40K. BIT POSITION : 7,725' 6.6' N & 0.4' W OF CENTER SLIDE 54' AT 23.1'/HR. SLIDE 34.57% ROTATE 65.43%. RUNNING 2 CENTRIFUGES CONVENTIONAL.(WT 8.6 VIS 32.) USED 27 BBLS DRILL WATER FOR HOLE VOLUME. LOSS 75 BBLS DRILL WATER INTO FORMATION. (LOSING 10.7 BBLS HR) PUMP CALCIUM CARBONATE/ LCM SWEEPS TO HELP WITH LOSSES. (ADD 130 BBLS OF FRESH WATER TO PITS FOR VOLUME AND SWEEPS) NO FLARE

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8/5/2012	0:00 - 5:30	5.50	DRLPRC	02	D	P		DRILL SLIDE 7710' - 8208' (498 ', 90.5'/HR) WEIGHT ON BIT 18-24K. AVERAGE WEIGHT ON BIT 21K. ROTARY RPM 55. MUD MOTOR RPM 79. STROKES PER MINUTE 110 GALLONS PER MINUTE 495. ON/OFF PSI 2130/1900. DIFFERENTIAL 230. TORQUE HIGH/LOW 13200/9400. OFF BOTTOM TORQUE 7500 STRING WEIGHT UP/DOWN/ROT 190/150/110. DRAG 40K. BIT POSITION : 8163'=5.9' N & 9.0' W OF CENTER SLIDE 54' AT 23.1'/HR. SLIDE 34.57% ROTATE 65.43%. RUNNING 2 CENTRIFUGES CONVENTIONAL.(WT 8.6 VIS 32.) USED 27 BBLS DRILL WATER FOR HOLE VOLUME. LOSS 75 BBLS DRILL WATER INTO FORMATION. (LOSING 10.7 BBLS HR) PUMP CALCIUM CARBONATE/ LCM SWEEPS TO HELP WITH LOSSES. (ADD 130 BBLS OF FRESH WATER TO PITS FOR VOLUME AND SWEEPS) 8-10' FLARE
	5:30 - 6:00	0.50	DRLPRC	07	A	P		RIG SERVICE
	6:00 - 6:30	0.50	DRLPRC	08	A	Z		***FAILURE: RIG EQUIPMENT - (GENERATOR) RIG WAS BLACKED OUT DURING RIG SERVICE REPAIR VFD
	6:30 - 7:30	1.00	DRLPRC	22	L	Z		***FAILURE: MWD TRYING TO REGAIN COMMUNICATION WITH THE MWD TOOL: AFTER THE BLACKOUT WE COULD NOT COMMUNICATE WITH THE MWD TOOL. I CALLED KENNY GATHINGS TO INFORM HIM OF THE SITUATION AND INFORM HIM THAT WE WERE LESS THAN 500' FROM TD WITH DIRTY WATER AND THAT WEATHERFORD THOUGHT WE WOULD HAVE TO PULL UP THE HOLE TO REGAIN COMMUNICATION WITH THE TOOL. HE ADVISED ME TO CALL BRIAN COCCHIERE AND INFORM HIM OF THE SITUATION. I CALLED BRIAN AND TALKED TO HIM, THE DECISION WAS MADE TO GO AHEAD AND DISPLACE THE WATER WITH MUD AS WE WERE CLOSE TO MUD UP POINT AND SINCE WE WERE GOING TO HAVE TO PUMP OUT OF THE HOLE A WAYS TO WORK WITH THE MWD WE WOULD MAKE OUR 1ST WIPER TRIP THEN GO BACK AND FINISH DRILLING TO TD THEN MAKE WIPER TRIP #2 AT TD. AN E-MAIL WAS SENT TO MYSELF AND KENNY GATHINGS FROM BRIAN UPDATING THE PROCEDURE.

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	7:30 - 9:30	2.00	DRLPRC	05	G	Z		***FAILURE: MWD WE CIRCULATED AND DISPLACED THE WATER WITH MUD FROM OUR STORAGE. WE ALSO CONDITIONED THE MUD AS IT WAS BROUGHT OVER. WE ENDED UP WITH A 40 VIS AND 11.1 MW. WHEN WE STOPPED CIRCULATING TO PREPARE FOR THE TRIP THE WEATHERFORD HAND INFORMED ME THAT HE REGAINED COMMINICATION WITH THE TOOL. i CALED BRIAN COCCHIERE AND INFORMED HIM, HE TOLD ME TO GO AHEAD AND DRILL TO TD THEN MAKE THE WIPER TRIPS. I CALLED KENNY GATHINGS TO LET HIM KNOW WHAT WAS GOING ON. AN EMAIL WAS SENT OUT TO THE RIG AND KENNY FROM BRIAN UPDATING THE PROCEDURE.
	9:30 - 17:30	8.00	DRLPRC	02	D	P		DRILL SLIDE 8208'- 8659' (451', 56.3'/HR) WEIGHT ON BIT 18-24K. AVERAGE WEIGHT ON BIT 21K. ROTARY RPM 55. MUD MOTOR RPM 79. STROKES PER MINUTE 110 GALLONS PER MINUTE 495. ON/OFF PSI 2970/2760. DIFFERENTIAL 210. TORQUE HIGH/LOW 12500/9000. OFF BOTTOM TORQUE 7500 STRING WEIGHT UP/DOWN/ROT 210/110/150. DRAG 60K. BIT POSITION : 8659' = 7' S 19' E OF CENTER SLIDE 0' AT 0'/HR. SLIDE 0% ROTATE 100%. CENTRIFUGES SHUT DOWN.(WT 11.2 VIS 39.) USED 25 BBLS DRILL WATER FOR HOLE VOLUME. LOSS 20 BBLS MUD INTO FORMATION. (LOOSING 3 BBLS HR) (ADD 0 BBLS OF FRESH WATER TO PITS FOR VOLUME AND SWEEPS) NO FLARE
	17:30 - 18:00	0.50	DRLPRC	07	A	P		RIG SERVICE
	18:00 - 20:00	2.00	DRLPRC	05	C	P		CIRCULATE / CONDITION AND CLEAN THE HOLE FOR THE 1ST WIPER TRIP.
	20:00 - 0:00	4.00	DRLPRC	06	E	P		MAKING WIPER TRIP #1 TO THE CASING SHOE. TIGHT HOLE 5050'-4950', 4500' - 4400' WE HAD TO BACK REAM OUT OF THE HOLE @ 4500'
8/6/2012	0:00 - 1:00	1.00	DRLPRC	06	E	P		FINISHED TRIPPING OUT OF THE HOLE TO THE CASING SHOE ON WIPER TRIP #1 WASHED THROUGH BRIDGES @ 4360' & 4480'
	1:00 - 5:00	4.00	DRLPRC	06	E	P		TRIPPED BACK IN THE HOLE TO 7328'
	5:00 - 5:30	0.50	DRLPRC	08	A	Z		***FAILURE: RIG EQUIPMENT - (ELEVATORS) REPLACE THE ELEVATOR LATCH BOLT
	5:30 - 6:00	0.50	DRLPRC	07	A	P		RIG SERVICE
	6:00 - 6:30	0.50	DRLPRC	06	E	P		CONTINUED TRIPPING IN TO 7989'

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	6:30 - 7:30	1.00	DRLPRC	05	A	S		THE HOLE HAD STOPPED DISPACING ON THE TRIP IN TO BOTTOM AND WE HAD LOST 120 BBL. VOLUME ON THE TRIP. BEFORE GOING ALL THE WAY TO BOTTOM WE STOPPED , ESTABLISHED CIRCULATION AND PUMPED AN LCM PILL I TALKED TO KENNY GATHINGS AND CALLED BRIAN COCCHIERE TO NOTIFY THEM OF THE HOLE CONDITION ON THE 1ST WIPER TRIP. I WAS TOLD AND NOTIFIED BY E-MAIL BY BRIAN COCCHIERE TO PROCEDE WITH A 2ND WIPER TRIP. THE EMAIL STATED TO MAKE 1 WIPER TRIP ON HOLES THAT WILL NOT BE LOGGED AND 2 WIPER TRIPS ON HOLES THAT ARE TO BE LOGGED
	7:30 - 8:30	1.00	DRLPRC	06	E	P		FINISHED TRIPPING IN THE HOLE ON THE WIPER TRIP
	8:30 - 10:00	1.50	DRLPRC	05	C	P		CIRCULATED AND CONDITIONED THE HOLE BEFORE MAKING WIPER TRIP #2 NO FLARE 11.2 MW 45VIS
	10:00 - 10:30	0.50	DRLPRC	07	A	P		RIG SERVICE
	10:30 - 22:00	11.50	DRLPRC	06	E	X		***SECOND WIPER TRIP TRIP OUT TO THE CASING SHOE ON WIPER TRIP #2 BEFORE LOGGING WE HAD DRAG COMING OUT @ 7560', 6780', 6670', 6600', 5862' & 4470' WE HAD A BRIDGE @ 8420' ON THE TRIP IN THE HOLE
	22:00 - 0:00	2.00	DRLPRC	05	C	P		***SECOND WIPER TRIP CIRCULATE AND CONDITION FOR LOGS AFTER WIPER TRIP #2 11.3 MW 45 VIS 10' FLARE ON BOTTOMS UP FOR 20 MINUTES.
8/7/2012	0:00 - 8:00	8.00	DRLPRC	06	A	P		TRIPPING OUT OF THE HOLE FOR LOGS AND LAYDOWN THE DIRECTIONAL TOOLS.
	8:00 - 8:30	0.50	DRLPRC	14	B	P		PULLED THE WEAR BUSHING
	8:30 - 14:00	5.50	DRLPRC	11	D	P		WE HELD A SAFETY MEETING RIGGED UP HALLIBURTON AND RAN THE TRIPLE COMBO LOG. DRILLER TD 8659' / LOGGERS TD 8641'
	14:00 - 14:30	0.50	DRLPRC	07	A	P		RIG SERVICE

US ROCKIES REGION

Operation Summary Report

Well: BONANZA 1023-5L4AS WHITE			Spud Date: 6/25/2012
Project: UTAH-UINTAH	Site: BONANZA 1023-5K PAD		Rig Name No: PROPETRO 12/12, XTC 12/12
Event: DRILLING	Start Date: 6/5/2012		End Date: 8/9/2012
Active Datum: RKB @5,342.00usft (above Mean Sea Level)	UWI: NE/SW/0/10/S/23/E/5/0/0/26/PM/S/1951/W/0/1965/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	14:30 - 15:30	1.00	DRLPRC	12	C	P		WE HELD A SAFETY MEETING WITH KIMSEY CASING / RIGGED UP THE FLOOR AND MADE UP THE SHOE, SHOE JOINT, FLOAT COLLAR AND 2 JOINTS OF CASING. WE STOPPED TO PUMP AND DO A FLOAT EQUIPMENT CHECK BEFORE RUNNING IN THE HOLE WITH THE CASING STRING. WE HAD A NEW DRILLER ON THE BRAKE BEING SUPERVISED BY A RIG MANAGER AND A MORE EXPERIENCED DRILLER. I WATCHED THEM MAKE UP THE SUB WITH CHAIN TONGS INTO THE CASING COLLAR. I ADVISED THE NEW DRILLER TO BE CAREFUL WITH HIS GRABBER BOX POSITION WHEN MAKING IT UP TO THE TOP DRIVE ON THE CASING RUN. I STEPPED AWAY FROM THE CONTROL AREA SO THEY COULD RUN THE PUMPS. THE DRILLER WHO WAS MENTORING TOLD THE DRILLER ON THE CREW TO PULL THE SLIPS WHILE CIRCULATING. I WAS NOT AWARE THAT THEY HAD DONE THIS NEITHER WAS THE RIG MANAGER THAT WAS IN THE DOGHOUSE (THERE ARE 2 RIG MANAGERS ON LOCATION) AS IT WAS CROWDED IN THE DOGHOUSE WITH PERSONEL OFF THE FLOOR FOR PUMPING OPERATIONS. DUE TO A VERY LIMITED FIELD OF VIEW FROM THE DOGHOUSE WE COULD NOT SEE THE ROTARY AREA. AFTER TESTING THE FLOAT EQUIPMENT THE DRILLER BACKED THE TOP DRIVE OUT OF THE CASING SUB WITH OUT SETTING THE SLIPS, OPENED THE GRABBER BOX AND DROPPED THE CASING DOWN THE HOLE WITH THE SUB STILL IN THE TOP OF IT.
	15:30 - 19:00	3.50	DRLPRC	19	E	Z		***FISHING JOB: LOST 3 JOINTS OF CASING & FLOAT EQUIP. I CALLED LOVEL YOUNG AND INFORMED HIM THAT WE HAD A FISH IN THE HOLE AND TALKED TO HIM ABOUT WHAT APPROACH WE WANTED TO USE TO RETRIEVE IT, I THEN CALLED KNIGHT OIL TOOL AND TALKED TO A FISHERMAN TO GET TOOLS AND TRUCKING ON THE WAY TO THE RIG LOCATION. THEN I CALLED BRIAN COCCHIERE TO LET HIM KNOW WHAT WAS GOING ON. WE REINSATALLED THE WEAR BUSHING WHILE WAITING FOR FISHING TOOLS AND PERSONAEL TO ARRIVE.
	19:00 - 0:00	5.00	DRLPRC	19		Z		***FISHING JOB: LOST 3 JOINTS OF CASING & FLOAT EQUIP. WE OFFLOADED AND STRAPPED/CALIPERED THE FISHING TOOLS, HELD A SAFETY MEETING WITH THE FISHING TOOL HAND, PICKED UP AND MADE UP THE FISHING BHA THEN TRIPPED IN THE HOLE PU: SCREW IN SUB / 4.5XH X 4.5 FH SUB / BUMPER SUB / 4.5FHX4.5 XH SUB / FISHING JAR / PUMP OUT SUB
8/8/2012	0:00 - 5:30	5.50	DRLPRC	19	A	Z		TRIPPING IN THE HOLE WITH THE FISHING TOOLS TO RETRIEVE THE CASING FISH.
	5:30 - 6:00	0.50	DRLPRC	07	A	P		RIG SERVICE

US ROCKIES REGION

Operation Summary Report

Well: BONANZA 1023-5L4AS WHITE		Spud Date: 6/25/2012	
Project: UTAH-UINTAH	Site: BONANZA 1023-5K PAD		Rig Name No: PROPETRO 12/12, XTC 12/12
Event: DRILLING	Start Date: 6/5/2012		End Date: 8/9/2012
Active Datum: RKB @5,342.00usft (above Mean Sea Level)	UWI: NE/SW/0/10/S/23/E/5/0/0/26/PM/S/1951/W/0/1965/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	6:00 - 9:00	3.00	DRLPRC	19	A	Z		WE WASHED THROUGH A FEW SMALL BRIDGES ON BOTTOM AND CLEANED UP TO THE TOP OF THE FISH @ 8524'. WE CHECKED THE PUMP RATE AND TORQUE IN THE DRILL STRING. 10' FLARE ON BOTTOMS UP 65 STROKES / 1069 PSI 8700 AVERAGE ON TORQUE. WE WORKED DOWN TO THE TOP OF THE FISH AND HAD AN INCREASE IN PRESSURE IMMEDIATELY. PICKED UP AND CIRCULATED THE SAT DOWN AND STARTED SCREWING INTO THE FISH. WE PICKED UP TORQUE TO 12500 AT ONE POINT AND WE WERE STILL ABLE TO CIRCULATE WITH PRESSURE 1080 PSI AT 52 STROKES THE STRING PU WEIGHT COMING OFF BOTTOM FOR INCREASED FROM 190 TO 250K WE WORKED THE STRING BACK DOWN AND THEN GOT IT TO START COMING FREE AND STARTED OUT OF THE HOLE.
	9:00 - 18:00	9.00	DRLPRC	19	A	Z		WE TRIPPED OUT OF THE HOLE WITH THE FISH, THEN LAID DOWN THE FISHING TOOLS AND THE FISH. WE RETRIEVED THE 3 JOINTS OF CASING AND THE FLOAT EQUIPMENT. I SPOKE WITH LOVEL AND HE TALKED TO JOHN STRAHAN, THE DECISION WAS MADE TO RUN CASING INSTEAD OF MAKING ANOTHER WIPER TRIP.
	18:00 - 18:30	0.50	DRLPRC	14	B	P		WE PULLED THE WEAR BUSHING
	18:30 - 19:00	0.50	DRLPRC	07	A	P		RIG SERVICE
	19:00 - 0:00	5.00	CSGPRO	12	C	P		WE HELD A SAFETY MEETING WITH KIMSEY CASING AND STARTED RUNNING 197 TOTAL JTS. OF CASING (82 JOINTS OF 4.5"/11.6# / I-80/ LTC + 1 MARKER) + (113 JTS. OF 4.5"/ 11.6#/ I-80/ DQX) + (1-DQX CROSS OVER). LANDED @ 8641.75', FLOAT COLLAR @ 8595.67', MESA VERDE MARKER @ 66414.18', CROSS OVER JT. @ 4981.45'. CASING DEPTH AT MIDNIGHT = 4552' CHECKED THE FLOAT EQUIPMENT @ 135' FILLED THE PIPE @ 884' & 2536'
8/9/2012	0:00 - 5:30	5.50	CSGPRO	12	C	P		FINISHED RUNNING 197 TOTAL JTS. OF CASING (82 JOINTS OF 4.5"/11.6# / I-80/ LTC + 1 MARKER) + (113 JTS. OF 4.5"/ 11.6#/ I-80/ DQX + 1-DQX CROSS OVER). LANDED @ 8641.75', FLOAT COLLAR @ 8595.67', MESA VERDE MARKER @ 66414.18', CROSS OVER JT. @ 4981.45'. CASING DEPTH AT MIDNIGHT = 4552' FILLED THE PIPE @ 5544'
	5:30 - 7:00	1.50	CSGPRO	05	D	P		CIRCULATING THE CASING ON BOTTOM. WE HAD A 3-8' FLARE AS SOON AS WE STARTED CIRCULATING AND HAD A 20' FLARE ON BOTTOMS UP

US ROCKIES REGION

Operation Summary Report

Well: BONANZA 1023-5L4AS WHITE		Spud Date: 6/25/2012
Project: UTAH-UINTAH	Site: BONANZA 1023-5K PAD	Rig Name No: PROPETRO 12/12, XTC 12/12
Event: DRILLING	Start Date: 6/5/2012	End Date: 8/9/2012
Active Datum: RKB @5,342.00usft (above Mean Sea Level)	UWI: NE/SW/0/10/S/23/E/5/0/0/26/PM/S/1951/W/0/1965/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:00 - 10:30	3.50	CSGPRO	12	E	P		WE HELD A SAFETY MEETING WITH BJ SERVICES, RIGGED UP THE FLOOR TO CEMENT, PRESSURE TEST TO 4000 PSI. PUMP 25 BBLS OF FRESH WATER. PUMP 165 BBLS (411 SX) OF PREMIUM LITE II LEAD CEMENT,12.0 PPG 2.26 YLD, .05 LB/SACK OF STATIC FREE + .2%BWOC R-3 +.25 LBS/SACK CELLO FLAKE + 5 LBS/SACK KOL-SEAL + .6% BWOC FL-52 + .4%BWOC SODIUM METASILICATE + 6% BWOC BENTONITE + 119.7%FRESH WATER . FOLLOWED BY 254 BBLS (1092 SX) OF 14.3# 1.31 YD 5.91 GAL/SK. POZ 50/50 TAIL CEMENT + 2% BWOC BENTONITEII + .005 LB/SACK STATIC FREE + 10% BWOW SODIUM CHLORIDE + .15%BWOC R-3 + .002GPS FP-6L + 58.7% FRESH WATER . SHUT DOWN AND FLUSH LINES. DROP PLUG AND DISPLACE W/ 133 BBLS OF FRESH WATER TREATED WITH CLAYFIX AND MAGNACIDE. LOST RETURNS AT 40 BBLS OF DISPLACMENT. LIFT PSI OF 2150 / BUMP PLUG 2800 PSI. . PRESSURE HELD 5 MINS. FLOAT HELD. FLOW BACK 1.5 BBLS. EST. TOC FOR LEAD 700', EST TOC FOR TAIL 3800'. RIG DOWN CEMENTERS.
	10:30 - 11:30	1.00	CSGPRO	14	B	P		SET THE PACK OFF
	11:30 - 12:00	0.50	CSGPRO	01	E	P		NIPPLE DOWN AND RELEASE THE RIG AT 12:00 8/9/2012

1 General

1.1 Customer Information

Company	US ROCKIES REGION
Representative	
Address	

1.2 Well/Wellbore Information

Well	BONANZA 1023-5L4AS WHITE	Wellbore No.	OH
Well Name	BONANZA 1023-5L4AS	Wellbore Name	BONANZA 1023-5L4AS
Report No.	1	Report Date	10/25/2012
Project	UTAH-UINTAH	Site	BONANZA 1023-5K PAD
Rig Name/No.		Event	COMPLETION
Start Date	10/25/2012	End Date	12/4/2012
Spud Date	6/25/2012	Active Datum	RKB @5,342.00usft (above Mean Sea Level)
UWI	NE/SW/0/10/S/23/E/5/0/0/26/PM/S/1951/W/0/1965/0/0		

1.3 General

Contractor		Job Method		Supervisor	
Perforated Assembly		Conveyed Method			

1.4 Initial Conditions

Fluid Type		Fluid Density	
Surface Press		Estimate Res Press	
TVD Fluid Top		Fluid Head	
Hydrostatic Press		Press Difference	
Balance Cond	NEUTRAL		

1.5 Summary

Gross Interval	7,082.0 (usft)-8,391.0 (usft	Start Date/Time	10/25/2012 12:00AM
No. of Intervals	31	End Date/Time	10/25/2012 12:00AM
Total Shots	144	Net Perforation Interval	46.00 (usft)
Avg Shot Density	3.13 (shot/ft)	Final Surface Pressure	
		Final Press Date	

2 Intervals

2.1 Perforated Interval

Date	Formation/ Reservoir	CCL@ (usft)	CCL-TS (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diameter (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
10/25/2012 12:00AM	MESAVERDE/			7,082.0	7,084.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-TS (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diameter (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
10/25/2012 12:00AM	MESAVERDE/			7,154.0	7,156.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
10/25/2012 12:00AM	MESAVERDE/			7,174.0	7,176.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
10/25/2012 12:00AM	MESAVERDE/			7,195.0	7,197.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
10/25/2012 12:00AM	MESAVERDE/			7,400.0	7,402.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
10/25/2012 12:00AM	MESAVERDE/			7,408.0	7,410.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
10/25/2012 12:00AM	MESAVERDE/			7,414.0	7,416.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
10/25/2012 12:00AM	MESAVERDE/			7,444.0	7,446.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
10/25/2012 12:00AM	MESAVERDE/			7,496.0	7,497.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
10/25/2012 12:00AM	MESAVERDE/			7,525.0	7,527.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
10/25/2012 12:00AM	MESAVERDE/			7,545.0	7,546.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
10/25/2012 12:00AM	MESAVERDE/			7,553.0	7,554.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
10/25/2012 12:00AM	MESAVERDE/			7,567.0	7,568.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
10/25/2012 12:00AM	MESAVERDE/			7,582.0	7,583.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
10/25/2012 12:00AM	MESAVERDE/			7,629.0	7,630.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	

2.1 Perforated Interval (Continued)

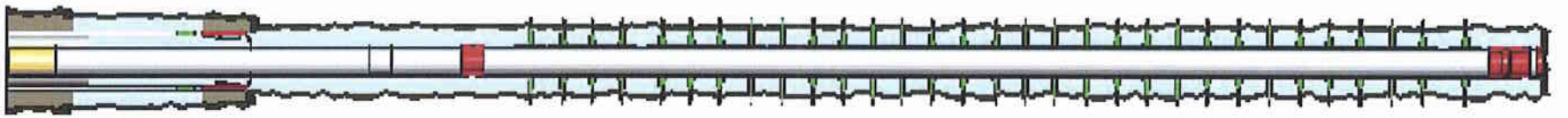
Date	Formation/ Reservoir	CCL@ (usft)	CCL-TS (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diameter (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
10/25/2012 12:00AM	MESAVERDE/			7,692.0	7,693.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
10/25/2012 12:00AM	MESAVERDE/			7,713.0	7,714.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
10/25/2012 12:00AM	MESAVERDE/			7,726.0	7,727.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
10/25/2012 12:00AM	MESAVERDE/			7,757.0	7,758.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
10/25/2012 12:00AM	MESAVERDE/			7,795.0	7,796.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
10/25/2012 12:00AM	MESAVERDE/			7,815.0	7,816.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
10/25/2012 12:00AM	MESAVERDE/			7,835.0	7,836.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
10/25/2012 12:00AM	MESAVERDE/			7,853.0	7,854.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
10/25/2012 12:00AM	MESAVERDE/			7,895.0	7,896.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
10/25/2012 12:00AM	MESAVERDE/			7,921.0	7,922.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
10/25/2012 12:00AM	MESAVERDE/			7,956.0	7,957.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
10/25/2012 12:00AM	MESAVERDE/			7,966.0	7,967.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
10/25/2012 12:00AM	MESAVERDE/			8,007.0	8,009.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
10/25/2012 12:00AM	MESAVERDE/			8,073.0	8,074.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	

2.1 Perforated Interval (Continued)

Date	Formation/ Reservoir	CCL@ (usft)	CCL-TS (usft)	MD Top (usft)	MD Base (usft)	Shot Density (shot/ft)	Misfires/ Add. Shot	Diameter (in)	Carr Type /Stage No	Carr Size (in)	Phasing (°)	Charge Desc /Charge Manufacturer	Charge Weight (gram)	Reason	Misrun
10/25/2012 12:00AM	MESAVERDE/			8,110.0	8,111.0	3.00		0.360	EXP/	3.375	120.00		23.00	PRODUCTION	
10/25/2012 12:00AM	MESAVERDE/			8,385.0	8,391.0	4.00		0.360	EXP/	3.375	90.00		23.00	PRODUCTION	

3 Plots

3.1 Wellbore Schematic



US ROCKIES REGION

Operation Summary Report

Well: BONANZA 1023-5L4AS WHITE		Spud Date: 6/25/2012
Project: UTAH-UINTAH	Site: BONANZA 1023-5K PAD	Rig Name No: ROCKY MOUNTAIN WELL SERVICE 3/3
Event: COMPLETION	Start Date: 10/25/2012	End Date: 12/4/2012
Active Datum: RKB @5,342.00usft (above Mean Sea Level)	UWI: NE/SW/0/10/S/23/E/5/0/0/26/PM/S/1951/W/0/1965/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
6/25/2012	-							
10/25/2012	10:30 - 11:30	1.00	FRAC	33	C	P		SURFACE CSG @ 2,538' TOC @ 2,610' RU HOT OILER : FILLED SURFACE WITH 2 BBLS TMAC PRESSURED TO 1000 PSI BROKE BACK TO 600 PSI, PUMPED 1/2 BBLS @ PRESSURED TO 1500 PSI KEPT BUMPING UP TO 1500 PSI FOR 1 HR COULDN'T PUMP INTO SURFACE CSG, BLED WELL OFF
	16:00 - 17:30	1.50	FRAC	33	C	P		FILL SURFACE CSG. MIRU B&C QUICK TEST. PSI TEST T/ 1000 PSI. HELD FOR 15 MIN LOST 12 PSI. PSI TEST T/ 3500 PSI. HELD FOR 15 MIN LOST 35 PSI. 1ST PSI TEST T/ 7000 PSI. HELD FOR 30 MIN LOST 60 PSI. NO COMMUNICATION OR MIGRATION WITH SURFACE CSG BLEED OFF PSI. SWIFN
11/2/2012	7:00 - 11:00	4.00	FRAC	37		P		PERF STG 1)PU 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 90 DEG PHASING. RIH PERF AS PER PERF DESIGN. POOH. SWIFW
11/5/2012	6:45 - 7:00	0.25	FRAC	48		P		HSM. HIGH PSI LINES.

US ROCKIES REGION

Operation Summary Report

Well: BONANZA 1023-5L4AS WHITE			Spud Date: 6/25/2012
Project: UTAH-UINTAH	Site: BONANZA 1023-5K PAD		Rig Name No: ROCKY MOUNTAIN WELL SERVICE 3/3
Event: COMPLETION	Start Date: 10/25/2012		End Date: 12/4/2012
Active Datum: RKB @5,342.00usft (above Mean Sea Level)	UWI: NE/SW/0/10/S/23/E/5/0/0/26/PM/S/1951/W/0/1965/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:00 - 18:00	11.00	FRAC	36	B	P		FRAC STG 1)WHP 1290 PSI, BRK 4233 PSI@4.7 BPM. ISIP 2154 PSI, FG. 0.7 CALC PERFS OPEN @ 50.4 BPM @ 4261PSI = 100% HOLES OPEN. (24/24 HOLES OPEN) ISIP 2224 PSI, FG. 0.7, NPI 70 PSI. MP 5616 PSI, MR 50.8 BPM, AP 4683 PSI, AR 50.1 BPM, PUMPED 30/50 OWATTA SAND. SWI, XO T/ WL. PERF STG 2)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 8141' P/U PERF AS PER DESIGN. POOH, XO T/ FRAC. FRAC STG 2)WHP 1878 PSI, BRK 2940 PSI@4.7 BPM. ISIP 1993 PSI, FG. 0.69 CALC PERFS OPEN @ 52.2 BPM @ 4633PSI = 100% HOLES OPEN. (24/24 HOLES OPEN) ISIP 2172 PSI, FG. 0.71, NPI 179 PSI. MP 5900 PSI, MR 53 BPM, AP 4545 PSI, AR 52.2 BPM, PUMPED 30/50 OWATTA SAND. SWI, XO T/ WL. PERF STG 3)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 7884' P/U PERF AS PER DESIGN. POOH, XO T/ FRAC. FRAC STG 3)WHP 1768 PSI, BRK 2604 PSI@4.7 BPM. ISIP 1800 PSI, FG. 0.67 CALC PERFS OPEN @ 52.7 BPM @ 4495PSI = 100% HOLES OPEN. (24/24 HOLES OPEN) ISIP 1808 PSI, FG. 0.67, NPI 8 PSI. MP 5515 PSI, MR 53.1 BPM, AP 4766 PSI, AR 52.6 BPM, PUMPED 30/50 OWATTA SAND. SWI, XO T/ WL. PERF STG 4)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 7660' P/U PERF AS PER DESIGN. POOH, XO T/ FRAC. FRAC STG 4)WHP 1450 PSI, BRK 1688 PSI@4.7 BPM. ISIP 1410 PSI, FG. 0.63 CALC PERFS OPEN @ 53 BPM @ 3877PSI = 100% HOLES OPEN. (24/24 HOLES OPEN) ISIP 1767 PSI, FG. 0.67, NPI 357 PSI. MP 4979 PSI, MR 53.4 BPM, AP 4060 PSI, AR 52.9 BPM, PUMPED 30/50 OWATTA SAND. SWI, XO T/ WL. PERF STG 5)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 7476' P/U PERF AS PER DESIGN. POOH. SWIFN.

JAN - 2 2013

US ROCKIES REGION

Operation Summary Report

Well: BONANZA 1023-5L4AS WHITE		Spud Date: 6/25/2012
Project: UTAH-UINTAH	Site: BONANZA 1023-5K PAD	Rig Name No: ROCKY MOUNTAIN WELL SERVICE 3/3
Event: COMPLETION	Start Date: 10/25/2012	End Date: 12/4/2012
Active Datum: RKB @5,342.00usft (above Mean Sea Level)	UWI: NE/SW/0/10/S/23/E/5/0/0/26/PM/S/1951/W/0/1965/0/0	

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
11/6/2012	7:00 - 18:00	11.00	FRAC	36	B	P		FRAC STG 5)WHP 1188 PSI, BRK 2722 PSI@4.7 BPM. ISIP 1730 PSI, FG. 0.67 CALC PERFS OPEN @ 52.7 BPM @ 5234PSI = 75% ISIP 1872 PSI, FG. 0.69, NPI 142 PSI. MP 5758 PSI, MR 53.6 BPM, AP 4565 PSI, AR 52 BPM, PUMPED 30/50 OWATTA SAND. SWI, XO T/ WL. PERF STG 6)PU 4 1/2 8K HAL CBP & 3 1/8 EXP GUN, 23 GM, .36 HOLE SIZE. 120 DEG PHASING. RIH SET CBP @ 7227' P/U PERF AS PER DESIGN. POOH, XO T/ FRAC. FRAC STG 6)WHP 713 PSI, BRK 2688 PSI@4.7 BPM. ISIP 1217 PSI, FG. 0.61 CALC PERFS OPEN @ 52.5 BPM @ 5249PSI = 67% ISIP 2069 PSI, FG. 0.73, NPI 852 PSI. MP 5384 PSI, MR 53.2 BPM, AP 4520 PSI, AR 52.6 BPM, PUMPED 30/50 OWATTA SAND. SWI, XO T/ WL. PU 4 1/2 8K HAL CBP. RIH SET KILL PLUG @ 7032'. POOH, SWI, DONE FRACING THIS WELL. TOTAL SAND = 140,573 LBS TOTAL CLFL = 6831 BBLS
11/7/2012	-							
12/3/2012	13:00 - 17:00	4.00	DRLOUT	31	I	P		MIRU, PU 3 7/8" BIT & POBS W/ XN SN, RIH W/ 125 JTS 2 3/8" L-80 TBG TO 4,000', SWI, WINTERIZE EQUIP, SDFN
12/4/2012	7:00 - 7:15	0.25	DRLOUT	48		P		HSM-JSA

JAN - 2 2013

US ROCKIES REGION

Operation Summary Report

Well: BONANZA 1023-5L4AS WHITE		Spud Date: 6/25/2012	
Project: UTAH-UINTAH	Site: BONANZA 1023-5K PAD		Rig Name No: ROCKY MOUNTAIN WELL SERVICE 3/3
Event: COMPLETION	Start Date: 10/25/2012		End Date: 12/4/2012
Active Datum: RKB @5,342.00usft (above Mean Sea Level)	UWI: NE/SW/0/10/S/23/E/5/0/0/26/PM/S/1951/W/0/1965/0/0		

Date	Time Start-End	Duration (hr)	Phase	Code	Sub Code	P/U	MD From (usft)	Operation
	7:15 - 15:30	8.25	DRLOUT	44	C	P		CONT TO PU TBG RIH TAG FILL @ 6,982', RU PWR SWVL, BRK CIRC, PRESS TEST BOP TO 3,000 PSI, LOST 0 PSI IN 15 MIN. C/O 50' SAND TAG PLUG #1 @ 7,032', DRL HAL 8K CBP IN 8 MIN, 400 PSI INC, FCP 200 PSI, RIH TAG @ 7,207'. C/O 20' SAND TAG PLUG #2 @ 7,227', DRL HAL 8K CBP IN 10 MIN, 200 PSI INC, FCP 200 PSI, RIH TAG FILL @ 7,456'. C/O 20' SAND TAG PLUG #3 @ 7,476', DRL HAL 8K CBP IN 10 MIN, 500 PSI INC, FCP 300 PSI, RIH TAG FILL @ 7,630'. C/O 30' SAND TAG PLUG #4 @ 7,660', DRL HAL 8K CBP IN 8 MIN, 300 PSI INC, FCP 300 PSI, RIH TAG FILL @ 7,854'. C/O 30' SAND TAG PLUG #5 @ 7,884', DRL HAL 8K CBP IN 9 MIN, 250 PSI INC, FCP 400 PSI, RIH TAG FILL @ 8,101'. C/O 40' SAND TAG PLUG #6 @ 8,141', DRL HAL 8K CBP IN 11 MIN, 200 PSI INC, FCP 500 PSI, RIH TAG FILL @ 8,560' (169' BLW BTM PERF), CIRC CLEAN, RD PWR SWVL, POOH LD 22 JTS TBG, LAND TBG W/ 247 JTS 2 3/8" L-80, EOT @ 7,856.54', RD FLOOR & TBG EQUIP, NDBOP, NUWH, DROP BALL POBS @ 1,800 PSI, PRESS TEST FLOWLINE BETWEEN HAL 9,000 & WELLHEAD TO 3,000 PSI, LET BIT FALL 20 MIN TURN OVER TO FBC, BATCH TREAT CSG W/ 72 BBLS WTR & SCALE INHIB, RDMO, WINTERIZE EQUIP, SDFN
								KB-15' HANGER-.83' 247 JTS 2 3/8" L-80-7,838.51' POBS-2.20' EOT @ 7,856.54'
	15:30 - 15:30	0.00	DRLOUT	50				TWTR=7,124 BBLS TWR=2,237 BBLS TWLTR=4,887 BBLS WELL TURNED TO SALES @ 1520 HR ON 12/4/2012. 3,400 MCFD, 1560 BWPD, FCP 743#, FTP 1700#, 20/64" CK.
12/5/2012	-							
	7:00 -			50				WELL IP'D ON 12/5/12 - 2133 MCFD, 0 BWPD, 0 BOPD, CP 2346#, FTP 1680#, LP 103#, 24 HRS, CK 20/64

Site: UINTAH_BONANZA 1023-5K PAD
Well: BONANZA 1023-5L4AS
Wellbore: BONANZA 1023-5L4AS
Section:
SHL:
Design: BONANZA 1023-5L4AS (wp01)
Latitude: 39.976090
Longitude: -109.352433
GL: 5327.00
KB: GL + 15' RKB @ 5342.00ft

TVDPath	MDPath	Formation
4256.00	4390.15	WASATCH
4856.00	4990.19	top of cylinder
6328.00	6462.22	MESAVERDE
8525.00	8659.27	SEGO

WELL DETAILS: BONANZA 1023-5L4AS

+N/-S	+E/-W	Northing	Ground Level: Easting	5327.00 Latittude	Longitude	Slot
0.00	0.00	14521602.38	2102003.61	39.976090	-109.352433	

CASING DETAILS

TVD	MD	Name	Size
2432.48	2527.30	8-5/8"	8-5/8

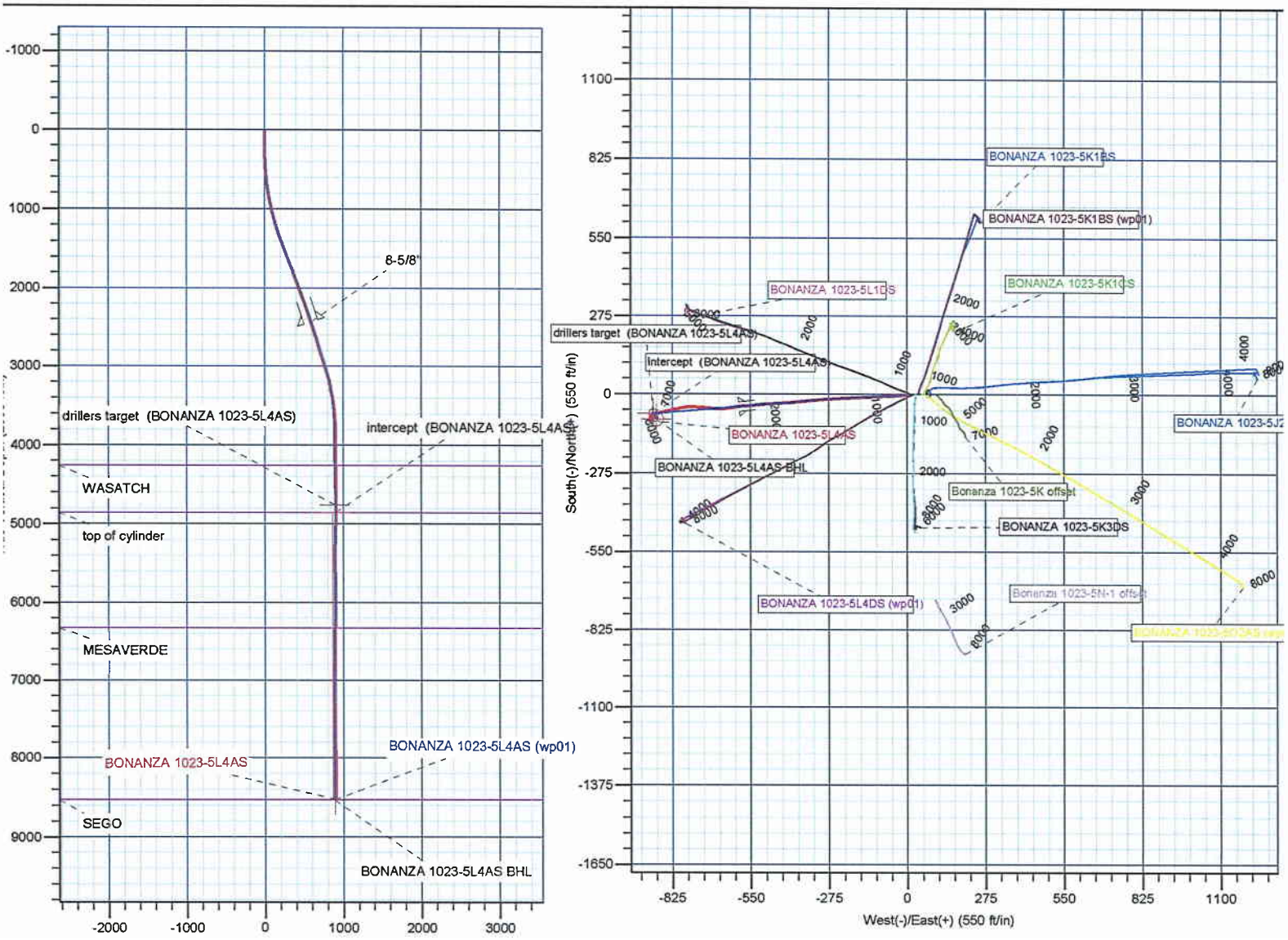
Azimuths to True Nort
Magnetic North: 10.8
Magnetic Fie
Strength: 52230.5sr
Dip Angle: 65.8
Date: 6/27/201
Model: IGRF201

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
drillers target (BONANZA 1023-5L4AS)	4756.00	-66.67	-891.59	14521519.25	2101113.41	39.975907	-109.355615	Circle (Radius: 15.00
intercept (BONANZA 1023-5L4AS)	4856.00	-66.73	-892.54	14521519.17	2101112.46	39.975907	-109.355618	Point
BONANZA 1023-5L4AS BHL	8525.00	-86.67	-881.59	14521499.44	2101123.78	39.975852	-109.355579	Circle (Radius: 25.00

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect
2506.00	18.73	265.15	2412.31	-42.69	-584.27	0.00	0.00	585.64
2956.00	18.73	265.15	2838.48	-54.90	-728.25	0.00	0.00	730.13
3858.54	0.68	271.89	3724.42	-67.08	-879.28	2.00	179.74	881.62
4890.19	0.68	271.89	4756.00	-66.67	-891.59	0.00	0.00	893.84
5202.24	0.37	149.40	5068.04	-67.47	-892.94	0.30	-160.55	895.26
8659.27	0.37	149.40	8525.00	-86.67	-881.59	0.00	0.00	885.84



US ROCKIES REGION PLANNING

UTAH - UTM (feet), NAD27, Zone 12N
UINTAH_BONANZA 1023-5K PAD
BONANZA 1023-5L4AS

BONANZA 1023-5L4AS

Survey: Survey #2

Standard Survey Report

14 August, 2012

Andarko Petroleum Corporation

Survey Report

Company:	US ROCKIES REGION PLANNING	**Local Co-ordinate Reference:**	Well BONANZA 1023-5L4AS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	**TVD Reference:**	GL + 15' RKB @ 5342.00ft
Site:	UINTAH_BONANZA 1023-5K PAD	**MD Reference:**	GL + 15' RKB @ 5342.00ft
Well:	BONANZA 1023-5L4AS	**North Reference:**	True
Wellbore:	BONANZA 1023-5L4AS	**Survey Calculation Method:**	Minimum Curvature
Design:	BONANZA 1023-5L4AS	**Database:**	edmp

RECEIVED
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Project	UTAH - UTM (feet), NAD27, Zone 12N		
Map System:	Universal Transverse Mercator (US Survey Feet)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	Zone 12N (114 W to 108 W)		

Site	UINTAH_BONANZA 1023-5K PAD				
Site Position:		**Northing:**	14,521,604.77 usft	**Latitude:**	39.976093
From:	Lat/Long	**Easting:**	2,102,073.63 usft	**Longitude:**	-109.352183
Position Uncertainty:	0.00 ft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	1.06 °

Well	BONANZA 1023-5L4AS					
Well Position	**+N/-S**	0.00 ft	**Northing:**	14,521,602.38 usft	**Latitude:**	39.976090
	+E/-W	0.00 ft	**Easting:**	2,102,003.61 usft	**Longitude:**	-109.352433
Position Uncertainty		0.00 ft	**Wellhead Elevation:**	ft	**Ground Level:**	5,327.00 ft

Wellbore	BONANZA 1023-5L4AS				
Magnetics	**Model Name**	**Sample Date**	**Declination (°)**	**Dip Angle (°)**	**Field Strength (nT)**
	IGRF2010	6/27/2012	10.88	65.85	52,231

Design	BONANZA 1023-5L4AS				
Audit Notes:					
Version:	1.0	**Phase:**	ACTUAL	**Tie On Depth:**	11.00

Vertical Section:	**Depth From (TVD) (ft)**	**+N/-S (ft)**	**+E/-W (ft)**	**Direction (°)**
	11.00	0.00	0.00	264.10

Survey Program **Date** 8/14/2012

From (ft)	To (ft)	Survey (Wellbore)	Tool Name	Description
191.00	2,506.00	Survey #1 (BONANZA 1023-5L4AS)	MWD	MWD - STANDARD
2,583.00	8,659.00	Survey #2 (BONANZA 1023-5L4AS)	MWD	MWD - STANDARD

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
2,506.00	18.73	265.15	2,412.31	-42.69	-584.27	585.56	0.00	0.00	0.00
TIE ON									
2,583.00	18.24	263.31	2,485.34	-45.13	-608.56	609.97	0.99	-0.64	-2.39
FIRST MWD SURVEY									
2,674.00	17.14	263.52	2,572.03	-48.31	-636.03	637.62	1.21	-1.21	0.23
2,764.00	15.34	270.29	2,658.45	-49.74	-661.11	662.72	2.90	-2.00	7.52
2,855.00	15.63	273.28	2,746.14	-48.98	-685.39	686.79	0.93	0.32	3.29
2,946.00	17.44	275.15	2,833.38	-47.06	-711.21	712.28	2.07	1.99	2.05
3,036.00	18.69	272.78	2,918.94	-45.15	-739.05	739.77	1.61	1.39	-2.63

Andarko Petroleum Corporation

Survey Report

Company:	US ROCKIES REGION PLANNING	**Local Co-ordinate Reference:**	Well BONANZA 1023-5L4AS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	**TVD Reference:**	GL + 15' RKB @ 5342.00ft
Site:	UINTAH_BONANZA 1023-5K PAD	**MD Reference:**	GL + 15' RKB @ 5342.00ft
Well:	BONANZA 1023-5L4AS	**North Reference:**	True
Wellbore:	BONANZA 1023-5L4AS	**Survey Calculation Method:**	Minimum Curvature
Design:	BONANZA 1023-5L4AS	**Database:**	edmp

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
3,127.00	18.06	266.40	3,005.31	-45.32	-767.69	768.28	2.31	-0.69	-7.01
3,218.00	16.81	259.40	3,092.14	-48.63	-794.71	795.50	2.68	-1.37	-7.69
3,308.00	14.31	257.65	3,178.83	-53.40	-818.37	819.52	2.83	-2.78	-1.94
3,399.00	12.44	257.28	3,267.36	-57.97	-838.92	840.43	2.06	-2.05	-0.41
3,490.00	10.25	257.28	3,356.58	-61.91	-856.38	858.21	2.41	-2.41	0.00
3,580.00	7.69	258.65	3,445.47	-64.86	-870.10	872.15	2.85	-2.84	1.52
3,671.00	6.31	256.65	3,535.79	-67.21	-880.93	883.17	1.54	-1.52	-2.20
3,762.00	4.69	264.03	3,626.37	-68.75	-889.50	891.85	1.94	-1.78	8.11
3,852.00	2.75	263.78	3,716.17	-69.37	-895.30	897.69	2.16	-2.16	-0.28
3,943.00	1.50	234.78	3,807.11	-70.29	-898.45	900.91	1.77	-1.37	-31.87
4,034.00	0.63	216.65	3,898.09	-71.38	-899.72	902.29	1.01	-0.96	-19.92
4,125.00	0.50	198.78	3,989.09	-72.16	-900.15	902.79	0.24	-0.14	-19.64
4,216.00	0.88	176.65	4,080.08	-73.23	-900.23	902.99	0.50	0.42	-24.32
4,307.00	1.06	176.65	4,171.07	-74.77	-900.14	903.06	0.20	0.20	0.00
4,397.00	1.31	175.65	4,261.05	-76.63	-900.02	903.13	0.28	0.28	-1.11
4,488.00	1.31	172.38	4,352.03	-78.70	-899.80	903.12	0.08	0.00	-3.59
4,578.00	1.50	167.78	4,442.00	-80.87	-899.41	902.96	0.25	0.21	-5.11
4,669.00	0.25	124.90	4,532.99	-82.14	-899.00	902.68	1.46	-1.37	-47.12
4,760.00	0.50	329.90	4,623.99	-81.91	-899.04	902.69	0.81	0.27	-170.33
4,850.00	1.50	325.53	4,713.97	-80.60	-899.90	903.42	1.11	1.11	-4.86
4,941.00	1.75	324.40	4,804.94	-78.49	-901.38	904.67	0.28	0.27	-1.24
5,031.00	0.50	19.65	4,894.92	-77.00	-902.05	905.19	1.69	-1.39	61.39
5,122.00	1.94	57.15	4,985.90	-75.79	-900.62	903.64	1.73	1.58	41.21
5,213.00	1.44	85.28	5,076.86	-74.87	-898.19	901.13	1.05	-0.55	30.91
5,303.00	1.94	65.53	5,166.82	-74.14	-895.67	898.55	0.85	0.56	-21.94
5,394.00	1.81	66.53	5,257.77	-72.93	-892.95	895.72	0.15	-0.14	1.10
5,485.00	1.50	113.53	5,348.74	-72.83	-890.54	893.31	1.48	-0.34	51.65
5,575.00	0.25	137.78	5,438.72	-73.45	-889.33	892.17	1.42	-1.39	26.94
5,666.00	0.96	298.67	5,529.72	-73.23	-889.87	892.68	1.32	0.78	176.80
5,756.00	1.50	313.65	5,619.70	-72.06	-891.38	894.07	0.69	0.60	16.64
5,847.00	1.50	311.28	5,710.67	-70.45	-893.14	895.65	0.07	0.00	-2.60
5,938.00	1.19	303.03	5,801.64	-69.15	-894.83	897.19	0.40	-0.34	-9.07
6,028.00	0.94	296.53	5,891.63	-68.31	-896.27	898.54	0.31	-0.28	-7.22
6,119.00	0.38	203.40	5,982.62	-68.25	-897.06	899.32	1.14	-0.62	-102.34
6,210.00	0.63	152.53	6,073.62	-68.97	-896.95	899.28	0.54	0.27	-55.90
6,300.00	0.75	138.53	6,163.61	-69.85	-896.33	898.76	0.23	0.13	-15.56
6,391.00	1.00	131.40	6,254.60	-70.82	-895.34	897.88	0.30	0.27	-7.84
6,481.00	1.13	136.28	6,344.59	-71.99	-894.14	896.80	0.18	0.14	5.42
6,572.00	1.50	132.15	6,435.56	-73.43	-892.63	895.45	0.42	0.41	-4.54
6,663.00	1.94	128.65	6,526.52	-75.19	-890.55	893.56	0.50	0.48	-3.85
6,753.00	1.31	125.78	6,616.49	-76.75	-888.52	891.70	0.71	-0.70	-3.19
6,844.00	1.56	116.03	6,707.46	-77.90	-886.57	889.88	0.38	0.27	-10.71
6,935.00	1.38	130.78	6,798.43	-79.16	-884.62	888.07	0.46	-0.20	16.21

Andarko Petroleum Corporation

Survey Report

Company:	US ROCKIES REGION PLANNING	**Local Co-ordinate Reference:**	Well BONANZA 1023-5L4AS
Project:	UTAH - UTM (feet), NAD27, Zone 12N	**TVD Reference:**	GL + 15' RKB @ 5342.00ft
Site:	UINTAH_BONANZA 1023-5K PAD	**MD Reference:**	GL + 15' RKB @ 5342.00ft
Well:	BONANZA 1023-5L4AS	**North Reference:**	True
Wellbore:	BONANZA 1023-5L4AS	**Survey Calculation Method:**	Minimum Curvature
Design:	BONANZA 1023-5L4AS	**Database:**	edmp

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,025.00	0.50	86.90	6,888.42	-79.84	-883.41	886.94	1.20	-0.98	-48.76
7,116.00	1.44	104.78	6,979.40	-80.12	-881.91	885.47	1.07	1.03	19.65
7,206.00	0.75	110.78	7,069.38	-80.61	-880.26	883.89	0.78	-0.77	6.67
7,297.00	0.88	76.28	7,160.38	-80.66	-879.03	882.66	0.55	0.14	-37.91
7,388.00	0.75	104.90	7,251.37	-80.65	-877.77	881.41	0.46	-0.14	31.45
7,478.00	0.75	261.53	7,341.36	-80.88	-877.79	881.45	1.63	0.00	174.03
7,569.00	1.50	287.40	7,432.35	-80.62	-879.51	883.14	0.98	0.82	28.43
7,660.00	1.79	281.74	7,523.31	-79.97	-882.04	885.59	0.36	0.32	-6.22
7,750.00	1.38	271.53	7,613.27	-79.65	-884.50	888.00	0.55	-0.46	-11.34
7,841.00	1.19	264.90	7,704.25	-79.71	-886.54	890.03	0.26	-0.21	-7.29
7,932.00	1.31	254.28	7,795.23	-80.08	-888.48	892.00	0.29	0.13	-11.67
8,022.00	1.50	251.65	7,885.20	-80.73	-890.59	894.17	0.22	0.21	-2.92
8,113.00	1.44	249.90	7,976.17	-81.49	-892.79	896.44	0.08	-0.07	-1.92
8,204.00	1.44	248.00	8,067.14	-82.31	-894.93	898.65	0.05	0.00	-2.09
8,294.00	1.44	229.53	8,157.12	-83.47	-896.83	900.66	0.51	0.00	-20.52
8,385.00	1.44	215.03	8,248.09	-85.15	-898.36	902.35	0.40	0.00	-15.93
8,476.00	1.50	202.28	8,339.06	-87.19	-899.47	903.67	0.36	0.07	-14.01
8,609.00	2.16	190.42	8,471.99	-91.26	-900.58	905.19	0.57	0.50	-8.92
LAST MWD SURVEY									
8,659.00	2.16	190.42	8,521.95	-93.12	-900.92	905.72	0.00	0.00	0.00
PROJECTION TO TD									

Survey Annotations

Measured Depth (ft)	Vertical Depth (ft)	Local Coordinates +N/-S (ft)	Local Coordinates +E/-W (ft)	Comment
2,506.00	2,412.31	-42.69	-584.27	TIE ON
2,583.00	2,485.34	-45.13	-608.56	FIRST MWD SURVEY
8,609.00	8,471.99	-91.26	-900.58	LAST MWD SURVEY
8,659.00	8,521.95	-93.12	-900.92	PROJECTION TO TD

Checked By: _____ Approved By: _____ Date: _____

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